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OF

Agricultural and Horticultural

IMPLEMENTS AND MACHINERY,

MANUFACTURED AND SOLD BY

TREDWELL & PELL,

AT THE

NATIONAL

AGRICULTURAL AND SEED WAREHOUSE,

No. 251 PEARL STREET,

BETWEEN JOHN AND FULTON STREETS,

NEW YORK.

ALFRED M. TREDWELL. [illegible] J. PELL.

IMPLEMENTS SUITABLE FOR UNITED STATES AND FOREIGN MARKETS.

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CATALOGUE,

WITH FULL DESCRIPTION,

OF

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TREDWELL & PELL,
NO. 251 PEARL STREET,
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ADVERTISEMENT.

The Proprietors, in offering their Catalogue for 1857 to the notice of their friends and the public, take the opportunity to tender their best thanks for the patronage they have experienced (while conducting their very extensive concerns), and express the hope, that their favors will still be continued, to mutual satisfaction. It has been their endeavor, and it will continue to be made their chief aim, to introduce to the notice of their customers, whatever of improvement may be discovered, in the construction of the various articles offered to their choice, and in particular, in the various Implements connected with Agriculture, as well as in the selection of the choicest seeds, both for Farm and Garden purposes; and by exercising their usual care and circumspection, they trust they may rely upon their friends for that preference which they have previously enjoyed, and which they gratefully acknowledge.

Great as have been the improvements in the construction of Agricultural Implements within the last few years, and particularly in that of the plow, the Centre Draft Plow (of which we keep many sizes and patterns on hand), still retains its pre-eminence over all others, the only additions to them being the increase of various sizes and patterns to fit them for every variety of soil. "Of easy draught, it turns the sward most perfectly, and in a clear, free soil, preserves its furrow without a holder; and if the ground is in the best condition for plowing, nearly prepares it for seeding, by its peculiar shape and turn of share and mould-board, which pulverize and disarrange the particles of the furrow-slice, and consequently aid fermentation and decomposition, and the elaboration of food for plants, from the organic matter of the soil; all at much less expense, than the same point is obtained by the harrow; and in perfection, perhaps fully equal to that 'spade husbandry,' which has been termed 'the perfection of good culture.' To follow this plow is to like it."

In connection with these plows, they are prepared to supply to order, everything in the Agricultural department of their establishment; as they continue to manufacture the best and latest improved machines, tools, etc., a portion of which only can be enumerated in this Catalogue. In the Seed department they will take especial pains to offer for sale only such seeds as can be fully relied upon, and they trust that their arrangements with the best seed growers in this country and in Europe, will enable them to give entire satisfaction. By these united means, they are enabled to offer to general notice, the choicest and most extensive assortment of Implements, Tools, Seeds, etc., on the most liberal terms.

Tredwell & Pell take this opportunity of observing, that their Mr. Jones has for years past supplied many West Indian, Spanish and South American estate owners, with Plows and other Implements, and being well acquainted with tropical agriculture, from personal observation, as well as aided by the suggestions and judgment of persons familiar with the implements long in use in the West India islands, South America and Mexico, he has been enabled to make many valuable improvements in implements for tropical agriculture.

Tredwell & Pell will continue to further and adopt every real improvement that may be thus suggested by practical men, or that they themselves may discover.

Simplicity of construction, and the best arrangement of the several parts of Implements and Machinery for exportation, and provisions for occasional necessary repairs, are points to which they will carefully attend, so as to give every facility to their successful introduction and satisfactory operation. Plantation machinery of all kinds made to order, at short notice.

TREDWELL & PELL,

National Agricultural Warehouse and Seed Store,

251 Pearl Street, N. Y.

AVISO.

Los que subscriben al ofrecer su Catálogo de 1858 á sus amigos, y al Público en general, aprovechan la oportunidad de demostrar su mas espresivo agradecimiento por la proteccion que han recibido, y espresar la esperanza que tienen que continuarà siendo de mutua satisfaccion.

Ha sido, y serà el principal objeto de ellos poner en conocimiento de sus favorecedores cualquier mejora que haya en la construccion de los variados instrumentos que tienen relacion con la agricultura; tambien como en la eleccion de las mas escogidas semillas, ya para huertas, ya para jardines, y confiados en su constante cuidado y asiduidad pueden contar con la preferencia que sus amigos les han dispensado hasta ahora, y de la que éllos se reconocen profundamente agradecidos.

Sin embargo, de las grandes mejoras en la construccion de los instrumentos de agricultura dentro de los últimos años particularmente en la del arado; el arado conocido por nombre de "Centre Draft Plow" (de los cuales siempre temos un surtido estensivo) aun conserva su premicia sobre lo demas con la sola diferencia de arreglarse en tamaños y figura, segun la variedad del terreno. "Es de tiro tan suave, que siendo el terreno libre y limpio, mueve la superficie de él tan perfectamente que preserva á los surcos sin otro auxilio; y si el terreno está en la mejor condicion para ararse, lo prepara para la siembra; pues su forma peculiar y vuelta de la reja y cama pulveira y deshace las partículas del surco y ayuda por consiguiente á la fermentacion, descomposicion y elaboracion del alimento para las plantas de la materia organica del terreno, con mucho ménos gasto que si hiciese con la greda, y con tanta perfeccion, quizas enteramente igual, al que se hace con la azada, por lo que se ha llamado 'la perfeccion de buena cultura.' Usarse de este arado, es gustar de él."

Ademas de estos arados, los proprietarios están dispuestos á llenar los pedidos de todo lo que en el ramo de agricultura poseen en su establecimiento, pues que ellos continuan fabricando las mas recientes mejoras en máquinas y herramientas de las que hacen una sucinta relacion en este Catálogo.

Las relaciones que ellos tienen con los mejores agricultores del paìs y de Europa los ponen en capacidad de ofrecer con la mayor confianza el surtido mas escogido y estenso de semillas, así como de instrumentos y herramientas à precios equitativos.

Tredwell y Pell aprovechan esta oportunidad para hacer saber que Mr. Jones por muchos años pasados ha abastecido á muchos agricultores de las Antillas Españolas, y America Central con arados y otros instrumentos, y habiendo hecho particular estudio de la agricultura dentro de los trópicos; como tambien ayudados por el juicio de personas familiarizadas con los instrumentos antes de uso en aquellas Antillas, Sur de America y Mejico ha hecho muchos adelantos estimables en los instrumentos para la agricultura bajo los trópicos.

Tredwell y Pell continuarán adelantando y adoptando todas las mejoras materiales que puedan ser sugeridas por hombres prácticos, o que ellos mismos puedan descubrir.

La sencillez de construccion y el mejor arreglo de las diversas piezas de respeto para las mismas, son puntos à que ellos prestaràn cuidadosa atencion, asi como para dar facilidad á su prospera introduccion y operacion satisfactoria. Se hacen máquinas de todas clases para fincas con arreglo à las órdenes que se cometan y à la mayor brevedad.

TREDWELL Y PELL,

DEPÓSITO DE INSTRUMENTOS DE AGRICULTURA,

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La liste suivante contient une partie de nos immenses fonds de marchandise.

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Toutes sortes d'engrais, comme Guano, Poudre des os, Plâtre.
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On offre aussi mille autres articles qu'il n' y a pas ici l'espace pour décrire.

Anzeige.

Die deutſchen Einwohner im ganzen Lande ſind erſucht, ihre Aufmerkſamkeit beſonders dem Verzeichniß von Artikeln, welche in dieſem Catalog enthalten ſind, zu ſchenken; derſelbe enthält ein vollſtändiges Aſſortiment von Ackerbau-Maſchinerie und Geräthſchaften, wie nur je eines von einem Hauſe in den Ver. Staaten dargeboten wurde. Da wir ungewöhnliche Vortheile in der Fabrikation derſelben haben, ſo ſind wir jetzt vorbereitet, alle Aufträge für Geräthſchaften und Maſchinen, nach irgend einem gewünſchten Muſter, mit Pünktlichkeit und Schnelligkeit auszuführen.

Wir möchten hier zu dem Farmer, Gärtner und Kunſtgärtner ſagen, daß wir alle die letzten und verbeſſerteſten Arbeiterſparungs-Maſchinen zu deren Gebrauch halten, theilweiſe beſtehend in folgenden, nämlich; Horse-Powers und Dreſchmaſchinen, paſſend für ein, zwei, vier und acht Pferde; um Waizen, Gerſte und Hafer, ꝛc. zu dreſchen. Pflüge von allen Größen und Muſtern, und brauchbar zum Pflügen auf jede Art und für jede Verſchiedenheit des Bodens. Eggen, Cultivators, Säemaſchinen, Horse Hoes, Korn-Aushülſer, Heu-, Stroh- und Kornſtengel-Schneiders, Gemüſe-Schneider, Aepfelmühlen mit Preſſe verbunden, Ochſen-Joche und Bügel, Hauen, Rechen, Spaten, Schaufeln, Heugabeln, Senſen und Senſengeſtelle, Gras-Sicheln, Sicheln, Korn-Cradles, Klee-Aushülſer, Mäh- und Pflügemaſchinen, Pferde-Heurechen, Waizen-Drillers, Farmer-Karren und Wagen, Garten-Bahren, Canal- oder Dreck-Bahren, Weg-Kratzers, Pumpen, Waſſereimer, Schwingen, Mehl- und Korn-Mühlen, von allen Größen, Dog-Powers, Butterfäſſer, und überhaupt alle für Plantagen, Farmen und Gärten paſſende Artikel.

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NB.—In dieſem Store wird auch deutſch geſprochen.

TREDWELL & PELL,

No. 251 PEARL STREET,

NEW-YORK.

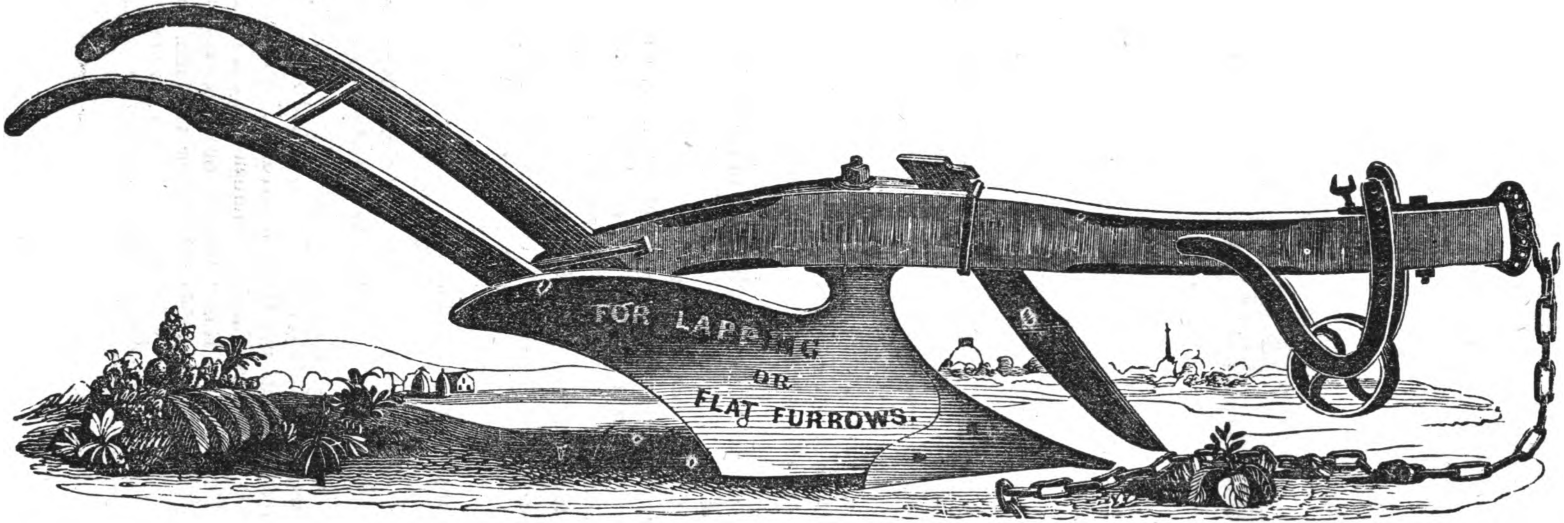
AGRICULTURAL IMPLEMENTS.

PLOWS.

The Eagle Centre Draft Plow,—"Prouty's Patent," of which we keep all sizes on hand, is now considered to be the best in use, in this and all other countries, for general work. The wood part is of the very best white oak timber, and the metal work is made of iron carefully mixed in a peculiar manner, so as to give it great superiority over that of other plows, and peculiarly adapt it to all kinds of soil; and, such is their perfection that, in many instances, they supersede the steel plows. These plows, for strength and durability, lightness of draft, and nicety of work, cannot be equalled. We make many sizes, particularly suited to the hard, sun-baked, or soft loamy soils of the West Indies and South America. The plows are so constructed that, in case breakage or wear render it necessary, any part can be readily replaced by an exact duplicate, on application to us; and the plow will then operate as well as at first. All parts are so made and put together, that they can be taken apart and packed for distant transportation, and joined again with great facility. Among the many styles which we manufacture may be found the side hill, sub-soil, meadow, sward, double mould-board, stubble, deep-tiller, corn, cotton, rice, seed, sugar cane, etc. They are of various sizes, from one to six horse, and calculated for all kinds of soil.

As we keep one of the most extensive assortments of goods of any house in the trade, our friends and customers, and the public generally, are invited to examine our stock of the following implements: Plows, Harrows, Cultivators, Horse Hoes, Horse Rakes, Seed Sowers, Corn Planters, Reaping Machines, Corn Shellers; Hay, Straw, Stalk, Vegetable and Meat Cutters, Garden and Field Rollers, Canal and Garden Barrows, Farm Carts and Wagons, Horse Powers, Threshers, Fan Mills, Garden Engines, Ox Yokes and Bows, Hay and Manure Forks, Rakes, Shovels, Scoops, Spades, Grain Cradles, Trucks, and in fact every article suitable for the farm, garden, and plantation.

HIGHEST PREMIUM EAGLE CENTRE DRAFT PLOW.



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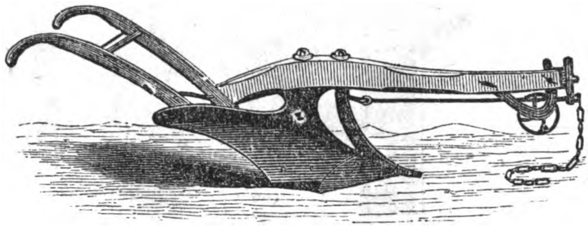


FIG. 1.

EAGLE PLOW WITH LOCK COULTER.

Fig. 1 represents a strong Lock Coulter Plow for breaking up new land. They are made sufficiently strong to stand the draft of four horses or oxen. The Lock Coulter is also made of wrought iron, and edged with steel; it passes up through the beam and is fastened by a screw nut, and also connects with the share, by locking quite through the share and mould-board, where it joins them. This mode of fastening gives a plow much greater strength, and makes it much more suitable to be used among rocks and newly-cleared land, and among roots, etc., as the Coulter cannot be turned one side, or forced out of its place: a good plow for all kinds of hard, rough plowing. The genuine Eagle Plows are all ground and polished, to prevent them clogging in soft, wet soils; and in many kinds of soils they are preferred to the wrought iron or steel ploughs.

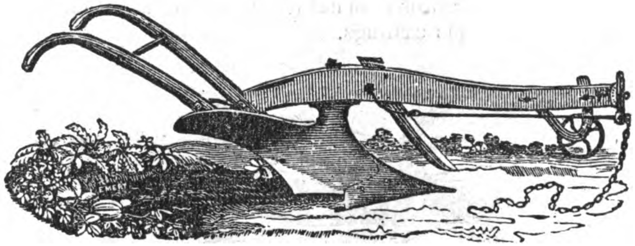


FIG. 2.

EAGLE F, OR GREEN SWARD PLOW.

Fig. 2 represents the genuine Eagle Plow F, with Coulter wheel and draft rod. This is a large size two or four-horse plow, of very light draft, designed expressly for green sward plowing. It will turn a furrow eight inches deep, by twelve to sixteen inches wide, and is a very excellent plow for all kinds of work, where grass, weeds, and stubble are to be covered up or turned under. It can be used with two horses, in all ordinary plowing; this plow in wet meadows or loamy soil cannot be surpassed. The depth and width of the furrow can be easily altered at any time, by simply raising or lowering the clevis on the end of the beam. Many advantages are obtained by using the draft rod and wheel; the one prevents the beam from breaking, while the other serves as a gauge to regulate the depth of the furrow.

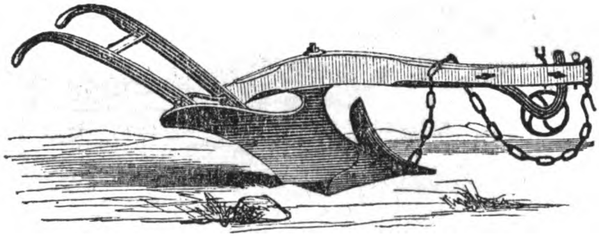


FIG. 3.

CENTRE DRAFT PLOW, EAGLE D.

Fig. 3 represents Centre Draft Plow, Eagle D. This is a medium size two-horse plow of the same mould as Eagle F, only one size smaller. This plow is designed for general work. It will turn a furrow six inches deep by twelve inches wide. It is of very light draft, and can easily be drawn by two horses. For green sward plowing the mould-board, land-side and share are all ground and polished, by which they are at once fitted for use in the most adhesive soil, so that the earth will not adhere to them and impede their progress. This also enables them to be used in the rich lands of the Southern and Western States. The metal of which they are composed is a mixture of several kinds, which gives them greater strength than ordinary plow castings. (This plow has taken more premiums than any other plow in this country. It can be warranted to give entire satisfaction in all cases, or be returned.) The wearing parts, such as points and edge of the shares, the bottom of the land-side and lower edge of the mould-board are all chilled or case-hardened, which makes them wear four times longer than common castings.

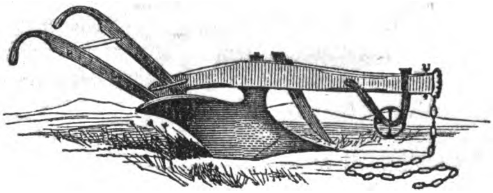


FIG. 4.

EAGLE PLOW C.

Fig. 4 represents the Eagle Plow C, which is a light two-horse plow, well adapted to sod and mellow soil; and wherever known is a great favorite, as it answers all purposes for small farms, where one plow only is used. It can be worked with or without a coulter and wheel. At the North it is called a light two-horse plow, but at the South would be considered a large size, and would generally require three mules to turn a furrow five inches deep, by eight to ten inches wide. It is very extensively used in New Jersey and on Long Island, and where the soil is light and sandy is easily worked with one horse. This, like all the rest of the genuine Eagle Plows, is ground and polished, and the castings case-hardened on those parts most exposed to wear, which gives them much greater durability than common castings.

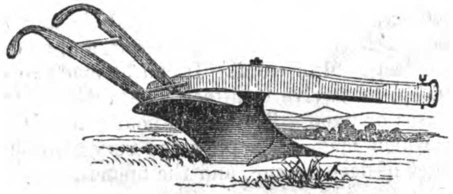


Fig. 5.

CENTRE DRAFT PLOW, EAGLE A AND B.

Fig. 5 represents the two smallest sizes of our Eagle *Centre Draft* Plows called Eagle A and Eagle B. They are of different sizes, but both calculated to be used with one horse. Will turn a furrow four inches deep, by six to eight inches wide. These Plows are very extensively used, and are much liked; are well adapted for plowing amongst corn, potatoes, cabbages, etc. In concluding our list of the Centre Draft Plows, we would state that they are all made by the most improved machinery, by which means each and every part of the different sizes are exact duplicates, so that parties sending to us for any part of a plow, will always find it to fit exactly, thus saving much time, trouble and money. The castings for these Plows are ground and polished, thus suiting them to all kinds of soil. The metal of which they are composed is a peculiar preparation of different kinds of iron, mixed with the special design of giving them more strength than ordinary plow castings. The parts most liable to wear, such as the edge of the share, land-side, and mould-board, are all chilled or case-hardened, so as to make them last about six times longer than common castings. Much more could be said in favor of these celebrated Plows, but in a work like this it is deemed unnecessary. It is sufficient to add that, wherever they have been used, they are preferred to all others; and that in scores of contests, before different societies, and in competition with the best of other plows, they have invariably been the victors.

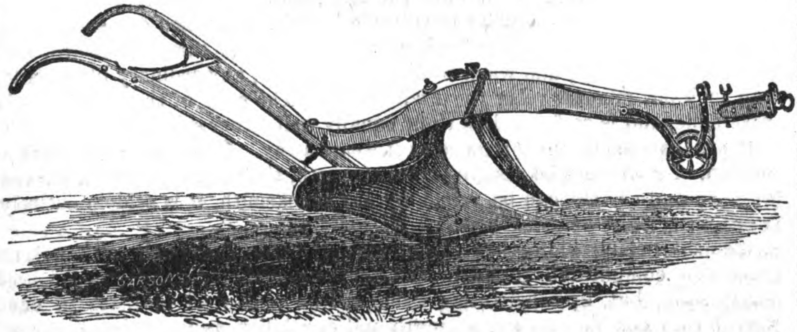


Fig. 6.

EAGLE 22, OR EXCELSIOR PLOW.

Fig. 6 represents our Eagle No. 22, or Excelsior Plow. This is a large plow, calculated expressly for turning in stubble and a heavy growth of weeds or coarse grass. It is of very easy draft, and made sufficiently strong to stand the hardest kind of work. It can be made to turn a furrow eight to ten inches deep, by twelve to fifteen inches wide. It can be used with two or four horses or oxen. The mould-board and land-side of this plow are very long, which makes the plow run very smooth and steady. The many advantages of deep tillage, and the numerous benefits resulting from breaking and thoroughly pulverizing the soil to a greater depth than has usually been practised by the farmers of our country, have now become so apparent, that plows modelled and formed to work to even twelve inches deep are often called for by our better informed agriculturists. Much could be said in favor of this plow; but a trial is its best recommendation.

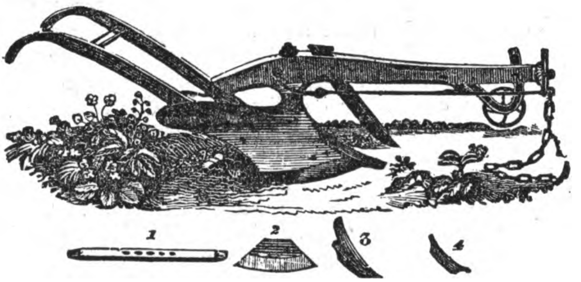


Fig. 7.

EAGLE SELF-SHARPENING ADJUSTABLE STEEL-POINTED PLOWS.

These are a new pattern, and are similar in form and general construction to the Eagle plows, except that the points and wings of the shares are made of wrought iron, in two parts or pieces, edged and pointed with steel. The point is simply a straight bar of iron, pointed at each end with steel, and has several holes along the middle, by which it is confined in its place. The object of these being to move the bar forward as it wears away, and thereby always secure a point of suitable length; and when one end of this bar is worn up too short for further use, the other is turned forward, and used the same way; and when both ends are gone, any ordinary blacksmith can in a few minutes relay them with steel. The wing of the share also is reversible, and is so formed as to fit equally well either side up or either end forward, as the case may require as it wears away. It is simply a flat plate of iron, of suitable thickness to insure strength, the edge only wearing away by use; and as that can be relaid by any blacksmith, it is seldom entirely worn out.

Self-sharpening plows have been exceptionable, inasmuch as they have been too complicated to be of sufficient strength for ordinary hard and stony soils; but, by substituting wrought iron and steel in place of cast metal, they combine greater strength and durability, and at a less expense, which does away such objections.

The point, being movable, can be placed so as to make the plow run more or less into the ground, as different soils may require.

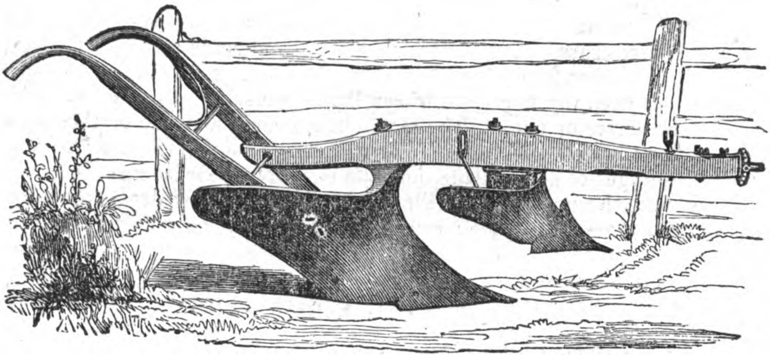


Fig. 8.

MICHIGAN SOD AND SUB-SOIL PLOW.

This consists of two plows, placed one before the other, on the same beam. The forward one takes a furrow from three to six inches deep, separating the roots of the grass or vegetable matter, and lays its slice surface down in the bottom of the previous furrow; and the after one follows from five to six inches deeper, and raises and deposits its slice on the top of the forward one. In being raised and turned, the sub-soil is broken and mellowed, and spread loose and evenly over the sward or vegetable matter and manures, and in such depth as admits of plowing and harrowing in the grain without disturbing them. The fermentation and decomposition of the under stratum or vegetable matter and manures commence just at the time the germination and growth of the grain plants commence, and afford the latter the rich nourishment of their gases at the very time it is most needed.

The draft of the plow is less than that of most plows taking the same sized furrow; it does better plowing in hard and stony ground, and land not brought to smoothness by use, than is done with the common plow; a single plowing with it disposes of the vegetable matter, and mellows the ground more effectually than is done in summer-fallowing with the common plow, by plowing twice.

We say, then, to the farmer, adopt the use of the Michigan Sod and Sub-Soil Plow. It will enable you to plow your ground deeper; it will save you nearly one-quarter the expense of putting in and cultivating your crops; it will deepen and enrich your soil with diminished expense in manuring, and will increase the yield of your crops from one-fourth to one-third.

This Plow received a special premium of $15 from the New York State Agricultural Society, at their Exhibition and Work of Plows, in June, 1850; and also a Gold Medal from the Massachusetts Charitable Mechanic Association, at their Annual Exhibition in 1850.

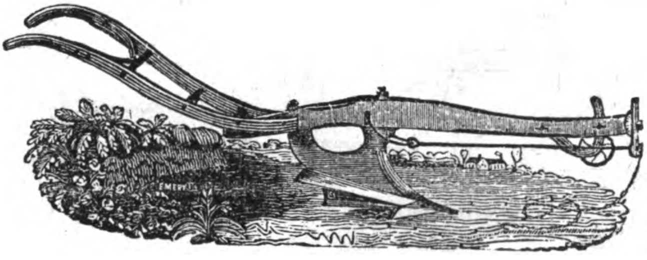
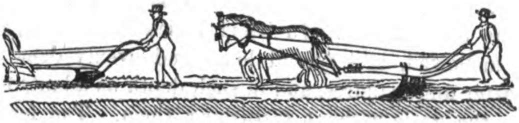


FIG. 9.

SUB-SOIL PLOW.

These Plows are used by following the team which turns up the surface soil, and in the bottom of the same furrow, breaking and pulverizing the sub-soil, but leaving it where found. This is of great advantage to crops, both in wet and dry land. In the dry, the sub-soil being deeply broken up and pulverized, the moisture is retained much longer than it otherwise would be, and the roots can and will descend lower and wider for their food; while in wet land the excess of moisture and water from heavy rains filters below, and is carried away from the surface.



METHOD OF USING THE SUB-SOIL PLOW.

Eagle No. 0.—SUB-SOIL.—Is a one-horse plow, or at the South is used with two mules. Its *sub-soil* furrow is from four to six inches deep, or below the surface furrow.

Eagle D.—SUB-SOIL.—Is a light two-horse plow. Its sub-soil furrow is from eight to ten inches deep.

Eagle C.—SUB-SOIL.—For ordinarily clear soils. Its size is medium, but it is of sufficient strength to stand the draft of two or three, or even four horses. It will run to the depth of twelve inches.

Eagle B.—SUB-SOIL.—This plow is very large, and will break or pulverize the soil to the depth of eighteen inches.

Eagle A.—SUB-SOIL.—Is about the same size as the last, but it has either a double or single wing-point. And it also has an inclined plane upon either or both sides at the same time.

The draft-rod had better be used with these plows. It can scarcely be dispensed with, as without it the off ox or horse is compelled to walk on the furrow, instead of on the hard land. Besides, the plow works more easily in the surface-soil furrow with than without this appendage.

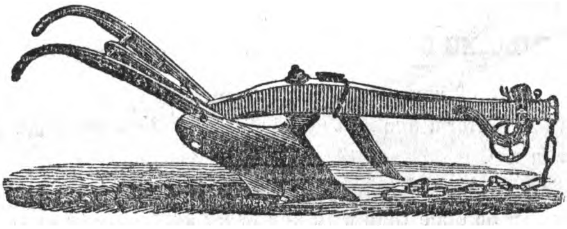


FIG. 10.

IMPROVED SIDE-HILL, OR SWIVEL PLOW.

Of these Plows we make four sizes. They are so constructed that the mould-board is easily and instantly changed from one side of the beam and wood-work of the plow to the other, which is done simply by unhooking the rear end of the mould-board, and letting it fall over on the ground, and bringing it under and up on the opposite side, which is all done by the plowman at the handles. It is as easy as any other plow to manage and change. By this plow the operator is enabled to do the work horizontally upon side hills—going each way and turning all the furrows equally well down the hill. This mode of plowing prevents all washing of the land or soil by heavy rains, to which all side hills are subject when plowed as level land. This same plow is extensively used for horizontal plowing. The mould-boards have been so improved and lengthened during the last two years, that level land is plowed equally as well as with the common plow; this leaves no dead or finishing furrow, nor does it make banks or ridges by turning furrows towards and on each other. They are also very useful in turning furrows from walls and fences, and particularly in road-making. They save much time of the team by turning short about, instead of crossing wide ends of lands in the fields, as is done with common plows.

No. 0. *Side Hill.*—A light one-horse or mule plow, designed to work amongst small trees, etc., in nurseries.

No. 1. *Side Hill.*—A light two-cattle greensward or stubble plow.

No. 2. *Side Hill.*—A three-cattle greensward plow, and is sometimes used with three or four cattle, according to the nature of the soil.

No. 3. *Side Hill.*—A large four or six-cattle plow, made very strong, and is suitable for heavy, rugged farm work.

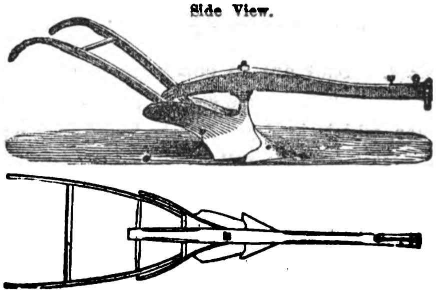
With wheel and cutter the medium sizes are highly approved for turning over mowing land for the purpose of re-seeding in the autumn, as with the cutter, they lay the furrow-slice *flat* and with great uniformity, avoiding the *centre* and bank furrows and leaving the land the same general level as before plowing.

RIDGING OR DOUBLE MOULD-BOARD PLOWS.

These are made of various sizes : that suitable for one horse, will, with the same labor, perform double the amount of *better* work than any single mould plow in use.

For *ridging, ditching, digging potatoes, etc.*, a larger size is used, by which better work can be done than with any other kind of plow or spade, and a good ditch can be opened by going twice through the same furrow.

Side View.



Top View.

FIG. 11.

No. 1 is used for ridging out land, and serves a very good purpose for plowing among corn, potatoes, or any other work where it is necessary to throw the dirt both ways. It serves the purpose of double plowing, and is much better where the rows are near together, than the single-mould plow, and saves half the labor. Other uses to which it may be applied on a farm, will readily suggest themselves.

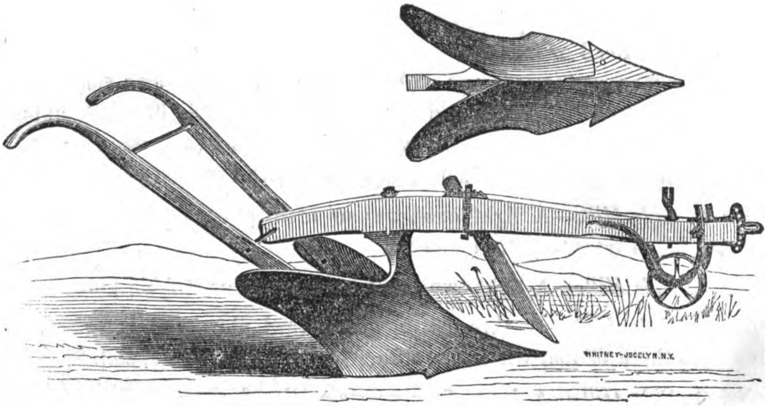

WHITNEY-JOCELYN.N.Y.

FIG. 12.

Nos. 2 and 3 are the same as the above in form and construction, but of larger sizes, and have points of greater width for digging potatoes. They are used in planting corn, ridging out land for root crops, and digging shallow ditches. They are also much used in the cultivation of the sugar cane at the South and in the West Indies.

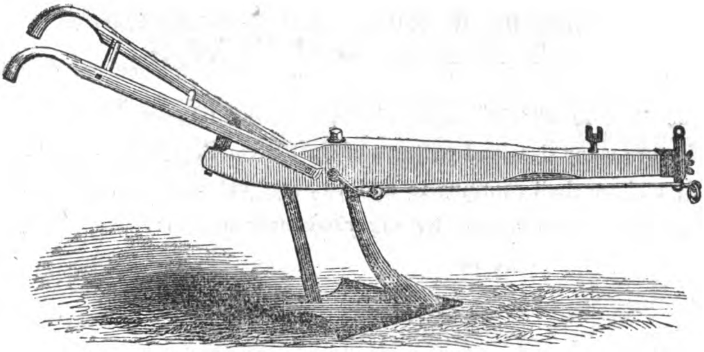


Fig. 13.

STEEL SUB-SOIL PLOW.

This Plow is of very recent invention, and is expressly designed for the cultivation of Root Crops, such as Ruta-bagas, Carrots, etc. Where the ground is required to be loosened to a great depth, without turning over a furrow this is the Plow to do it.

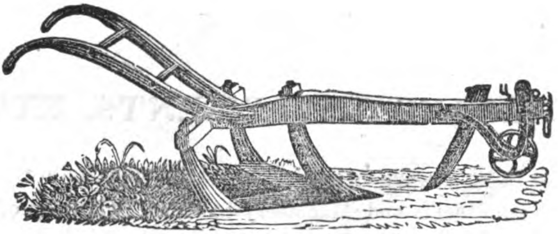


Fig. 14.

PARING PLOW.

The above Plow is much used on turf land. By its peculiar construction, it is well adapted for slicing or paring the turf preparatory to burning. It has a large, thin, flat share, edged with steel; also a strong lock coulter in the centre, and coulters on the outer edge of the share, cutting the turf, as it moves along, into two strips about twelve inches wide, and as deep as required. After the turf is pared off in strips, men follow with spades and cut it into suitable lengths; these pieces are then thrown into heaps, and, after drying, they are burned, and the ashes spread broadcast over the land.

STEEL PLOWS.

In addition to all the Eagle Plows, described on preceding pages, we manufacture many sizes and patterns of Cast Steel Plows, for every variety of soil; and we shall continue to add to our great variety of patterns, all new improvements that practical experience may approve.

◆

NEW YORK, OR COMMON PLOWS.

We also manufacture a great variety of common Cast Plows, generally known as Minor & Horton's, Moore's, Allen's, Dutcher's, Bergen, Southern, and all other patterns known in this and other markets.

For numbers and sizes, see opposite page.

◆

FARMING IMPLEMENTS, ETC.

In addition to the above, we are prepared to manufacture all kinds of Agricultural implements and Machinery to order. Castings of all kinds made to order, and at the shortest possible notice. Our business connections are such as to secure a speedy knowledge of all improved or newly-invented Agricultural Instruments, wherever originating; and we will at once furnish the public with such of them as may be important to the improvements of Agriculture.

Among the articles composing our stock, are many sizes and forms of Plows, Harrows, Cultivators, Horse Hoes, Field and Garden Rollers, Corn and Seed Planters, Horse Powers and Threshers, Reaping and Mowing Machines, Hay, Straw and Stalk Cutters, Vegetable Cutters, Hay and Harvesting Tools and Machines in all their variety; with almost every article used on the Plantation, Farm, or Garden.

SIZES, STYLES AND NUMBERS

OF

COMMON AND OTHER PLOWS

MANUFACTURED BY

TREDWELL & PELL.

LIGHT ONE HORSE, OR MULE PLOWS, FOR THE SOUTH.

One Horse or Mule,	No. 10¼	One Horse or Mule,	No. A 6
“ “	“ 11¼	“ “	Davis, 6 inch
“ “	“ 12½	“ “	“ 7 “
“ “	“ 13¼	“ “	No. 76
“ “	“ 14	“ “	“ 80
“ “	“ 15	“ “	Corn
“ “	“ 50	“ “	Seed
“ “	“ 60	“ “	“ A 1
		“ “	“ A 2

MINOR & HORTON PLOWS.

Light One Horse, . . .	No. 18	Medium Two Horse, Sod,	No. 20
“ “ . . .	“ 18½	Heavy “ “ Stubble,	“ 21
One Horse, ...	“ 19	Two or Four Horse, Breaking up, ...	“ 22
Light Two Horse, . . .	“ 19½		

J. M. & CO. COMMON ONE AND TWO HORSE PLOWS.

Light One Horse, . . .	No. 1	Two Horse, ...	No. 3
“ “ . . .	“ 1½	Heavy Two Horse, . . .	“ 4
One Horse, ...	“ 2	Road Plow, ...	“ 6

DUTCHER PLOWS.

Medium Two Horse, . .	No. 1½	Heavy Two Horse, . . .	No. 3
" "	" 2		

WOOD'S PLOWS.

Light Two Horse, . . .	No. 1½	Medium Two Horse, . .	No. 2½

SIDE HILL PLOWS.

Light One Horse, . . .	No. 0	Medium Two Horse, . . .	No. 2
One Horse, ...	" 1	Two Horse, ...	" 3

DOUBLE MOULD-BOARD, OR RIDGING PLOWS.

One Horse	No. 1	Two Horse, ...	No. 3
Light Two Horse, ...	" 2	Four Horse, Sugar Cane, .	" 6

SUB-SOIL PLOWS.

Four Horse, ...	No. A	One Horse, ...	No. D
Medium Two Horse, . .	" B	Light One Horse, . . .	" 0
Light Two Horse, . . .	" C	" " . . .	" 1

In addition to the above, we have many sizes and styles not enumerated in this list, such as the Michigan Sod and Sub-soil, or double Plow, Deep Tiller, Stubble, Road Plows, Rice, Trenching, Steel Plows, etc. We always furnish Draft-rods, Coulters and Wheels whenever they are ordered; also, extra parts in case of breakage or wear. Persons ordering Plows will please state what kind of plowing they wish to do, and we can then send them the implement best adapted for their work.

HARROWS.

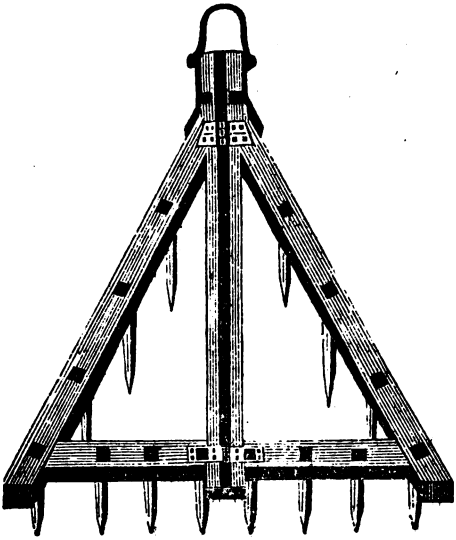


Fig. 15.

TRIANGULAR FOLDING HARROW.

This Harrow is well adapted for rough, heavy work, and is made very strong, with extra large size teeth. It has also strong iron hinges, so that, on rough, new land, it will adjust itself to all the inequalities of the ground; thus doing its work in a thorough manner.

Of this style of Harrow we make three sizes.

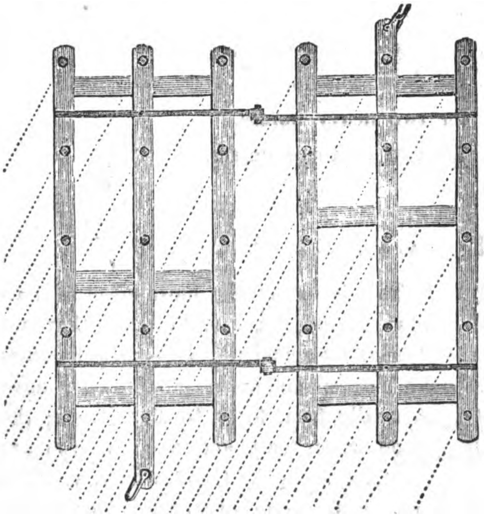


Fig. 16.

DOUBLE, OR HINGE HARROW.

Double, or Hinge Harrow.

This is composed of two separate harrows, joined by strong iron hinges, that are bolted onto the frame, and extend all the way across, thus making it doubly strong. When thus arranged it makes a large size two-horse harrow, that will take a breadth of five feet. By taking out the two centre bolts, it forms two small harrows that can be worked by one horse, and is well adapted to go between rows of corn, potatoes, etc.

THE GEDDES HARROW.

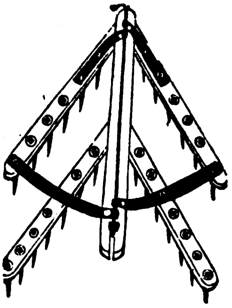


FIG. 17.

The Geddes Harrow is considered by those who have used both to be superior to the square harrow, inasmuch as it draws from a centre, without an uneasy and struggling motion, and is. of course, easier for the team.

The accompanying cut is so simple and distinct, it needs no description in this place. Being hung by hinges, it is easily lifted when in motion, to let off collections of weeds, roots, or other obstructions. It can be doubled back, and is of very convenient form to be carried in a wagon about the farm. Some have teeth put in as in common harrows, simply by being driven in from the upper side; others have the teeth so made as to be let through the timber from the under side, with a washer below, and a nut and screw on the top; this avoids the losing of teeth, by preventing them from dropping out, as in the common harrows.

The work performed by this harrow is better, with one operation, than can be done with the common, or A harrow by going twice over the ground.

There are several sizes, containing more or less teeth, as required. The following table shows the number of teeth in the several sizes.

18	teeth,	for one or two horses.
22	"	for two light horses.
26	"	for two heavy horses.
30	"	for two or three horses.

SCOTCH, OR SQUARE HARROW.

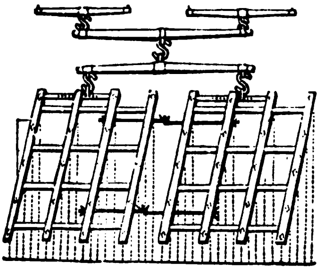


FIG. 18.

This is one of the most effectual harrows in use, for smooth land; they are formed by connecting two small harrows by hinges, as shown in the cut; have generally from forty to sixty teeth; the wood work, teeth and wrought iron are lighter than in the Geddes harrow. The two can be detached, and used separately with a single horse.

EMERY'S CORN PLANTER AND SEED DRILL.

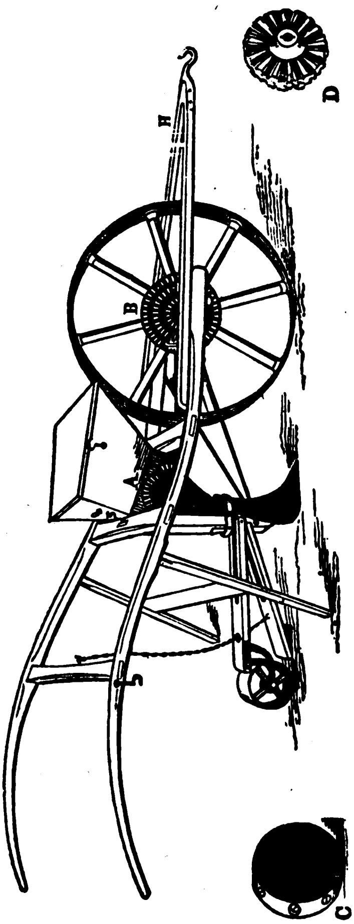


Fig. 19.

This cut represents the latest and most approved Seed Planter now in use. It can be operated either by hand or horse, and by its various changes can be so altered as to plant all kinds of seeds any distance apart, from two inches to eight feet, either in hills or drills. It is arranged to drop any desired quantity at a time, and the changes for planting different kinds of seeds, or altering the distance, can be made in a few minutes.

This machine makes the drill, drops the seed, covers it up, and nicely rolls it, at one operation. One acre per hour is a fair estimate of its capacity for planting. With this, all small seeds are dropped by means of a circular brush, revolving inside the hopper; the quantity, as well as the different kinds, of seeds being regulated by means of movable tin plates, pierced with holes of various sizes; which, being placed in the bottom of the hopper, the seed is forced through the holes by the brush. By this means all seeds, as carrot, onion, turnip, parsnip, etc., without regard to size or weight, are dropped with equal precision. To plant corn, peas, beans, etc., use the cylinder alone.

As full directions invariably accompany each machine, we deem it unnecessary to give them here.

SEED SOWER NO. 0.

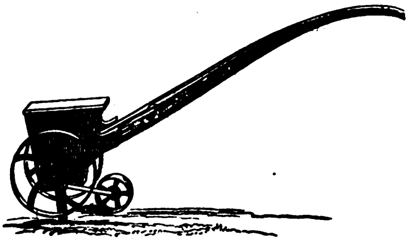


FIG. 20.

This is a small Hand Drill, designed for the garden. It is a cheap, light, pretty sower, well adapted to the wants of those who cultivate root and vegetable crops on a limited scale; and will sow all such crops, excepting peas and beans. It opens the ground, sows the seed, covers and rolls it, at one operation or passing.

SEED SOWER NO. 1.

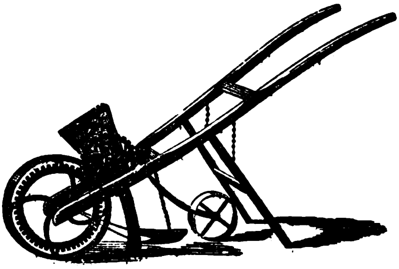


FIG. 21.

Seed Sower No. 1 is adapted to garden or field sowing, is a size larger than No. 0, and is designed for sowing the same kinds of seeds. The cylinder and brush within the hopper, go by gearing, and thus are always sure to operate.

SEED SOWER NO. 2.

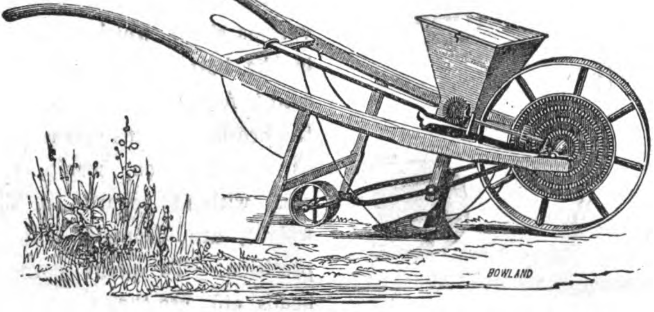


FIG. 22.

This is a size larger than No. 1, and is designed for the same purpose as the Emery Seed Planter, shown on page 25. To be used by hand alone.

PRATT'S SEED SOWER AND TURNIP DRILL.

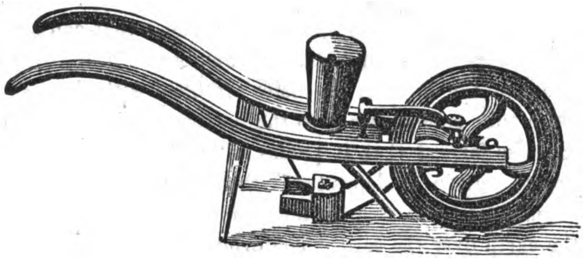


FIG. 23.

In using this machine, the farmer may be certain that his seed is put into the ground, and, at the same time, in the best possible manner. There has been a great difficulty in machines for sowing garden seeds; they are very apt to clog up, and the farmer might go over an acre of land, and not sow a single seed; but not so with this, as it is so constructed that it cannot possibly clog. In using this Sower, the farmer can save one-half of his seed, and do the work at less than one-quarter the expense of the common way of sowing his seeds, and have it done in a much better manner; it opens the furrows, drops the seed, covers it over, and rolls them down. It will sow almost any kind of garden seeds; say ruta-baga, turnip, carrot, onion, etc. It is highly recommended by a great number of persons who have used it the present season.

IMPROVED CORN PLANTER.

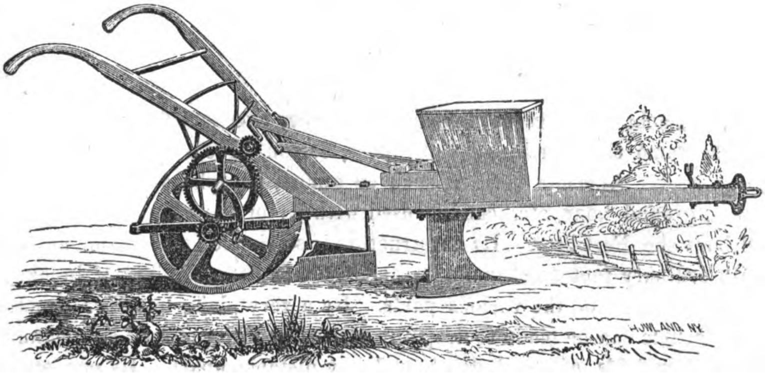


FIG. 24.

Fig. 24 represents one of the best machines in use for planting corn. The seed is put into the hopper above the beam, and, as the horse moves along, the share below opens the furrow; the corn is then dropped by arms moving horizontally. These arms have holes that can be altered to a proper size for receiving any required number of grains; and as they pass in and out of the hopper, the holes are filled with the seed, which is dropped into a tube conducting it to the bottom of the drill made by the share, which is so formed that it passes under the surface at any required depth, where the grain is deposited without turning over the earth. A triangular iron follows to remove all lumps and stones, and a roller to compress the earth over the seed. The dropping of the seed is always visible to the operator, and this ensures his work being perfectly done. The arms are made to drop the corn nearer or further apart, by different sized wheels fastened on the crank, moving the arms quicker or slower, as required. The machine requires a small horse or mule to draw it, and with a boy to tend and drive, will plant from eight to ten acres per day, according to the width of the rows, and at any required distance apart.

BILLINGS' IMPROVED PLANTER AND FERTILIZER.

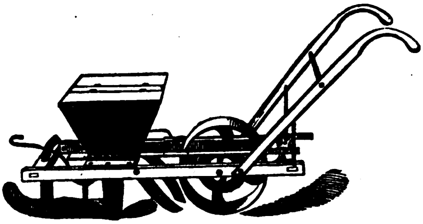


FIG. 25.

This machine is of recent invention, and very excellent for planting, and, at the same time, fertilizing, corn, peas, cotton, broom-corn, or any other large seed. Any fine manure, such as guano, phosphate of lime, plaster, ashes, ground bone, etc., can be used with it; or the Planter can be used without the Fertilizer. Its construction is so simple as to enable any one with ordinary tact to manage it; and there is little liability of breakage or derangement of the various parts. By a very plain, but sure process, the machine can be made to drop any desired quantity of seed and manure, in hills or drills, of equal depth, and any distance apart. By one operation, the work is completed. Full directions with each Planter.

PATENT GRAIN DRILL.

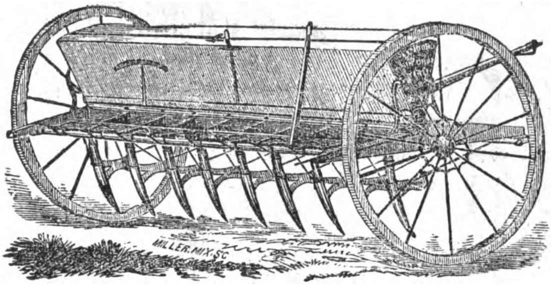


FIG. 26.

The following are the advantages this Drill possesses over other Grain Drills, viz.: It sows all grain and seeds, from peas and corn to grass seed, as well as any other Drill sows wheat, not failing thus to perform in sowing even beet or carrot seed; and it is difficult to clog it with any of the trash and foul stuff commonly found in grain, such as straw, chaff, stems of tare, or other weeds. It will also sow any grain soaked and rolled in lime, plaster, ashes, guano, poudrette, etc. It also sows lime, plaster, ashes, and all dry fertilizers which are fine enough to pass through the machine. It may also be used for planting corn, beans, etc., in drills, for which purpose there is nothing better. Whatever it will sow in drills it will just as readily sow broadcast, by removing the drill tubes. Directions accompany each machine.

PATENT BROADCAST SOWING MACHINE.

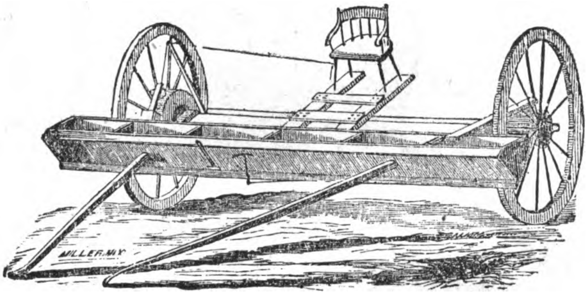


FIG. 27.

This machine is universally acknowledged to be the best implement in our country for the purpose for which it was intended. It sows correctly all kinds of grain (and any desired quantity per acre), from peas to grass seed, including wheat, rye, oats, barley, buckwheat, rice, hemp, flax, clover and timothy seed; also plaster, lime, salt, ashes, bone dust, etc. It will dust every inch of ground on an acre of land, with less than half a bushel of plaster, and 30 or 40 bushels of lime may be thus evenly applied to the same amount of land. It sows ten feet wide, or may be made narrower, to order.

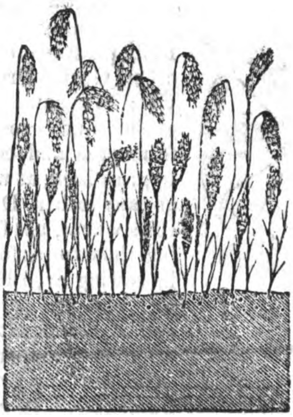


FIG. 28.

Wheat Sown Broadcast.

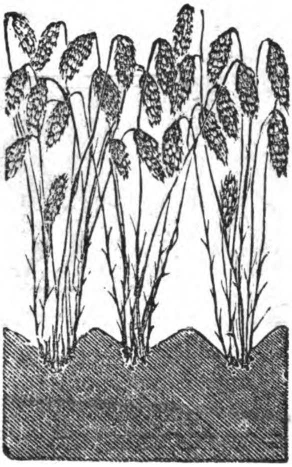


FIG. 29.

Wheat Sown in Drills.

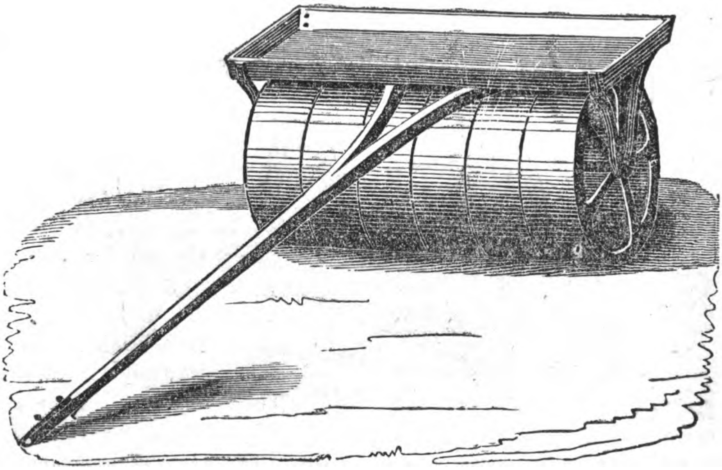


FIG. 30.

CAST-IRON FIELD ROLLER.

This cut represents the most approved kind. It is constructed wholly of iron, except the tongue and box, which are of wood—the box being intended to receive stones, etc., picked up on the field, or for giving extra weight to the roller. They are composed of from three to six separate sections, each 1 foot long, and from 20 to 30 inches in diameter; and are placed upon a wrought iron arbor, on which they turn independently of each other, so that in turning round they are not liable to leave the ground uneven.

The following is the table of sizes:

No. 1,	Four Sections,	24	inches diameter.
No. 2,	Five "	28	"
No. 3,	Six "	30	"

We make them as above, or all of either size sections.

GARDEN ROLLER.

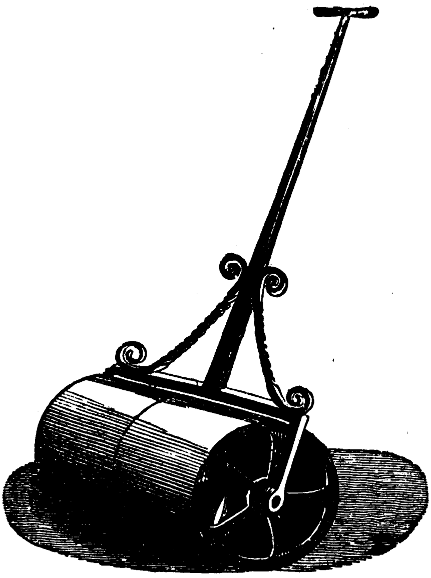


Fig. 31.

This is much used by horticulturists and in parks, for rolling walks, etc. It consists of two or three sections, twelve inches wide, and twenty or more in diameter. To add to their weight, we have irons to slip on the shaft, within the sections, which, besides increasing their power, are so hung as to elevate the handle; thus always keeping it clean. The handle is of wrought-iron, fastened to the arbor; and so made that a horse can be attached, though the roller is generally worked by hand. It is divided into sections for convenience in turning; as, if solid, the earth is scraped up on either side; also, adding much to the labor of moving it. As now made, when turning, one roller is moving backward while the other moves forward. Another advantage is, that in case one section breaks, by any mishap, its place can be supplied without injury to any other part of the machine. The following table describes the sizes:

No. 1,	Two Sections,	12 inches long,	20 inches diameter.
No. 2,	"	12 "	24 "
No. 3,	"	12 "	28 "
No. 4,	"	12 "	30 "

HAND CULTIVATOR.

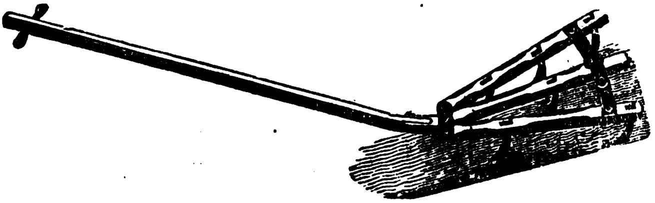


FIG. 32.

This is a very useful implement for use in garden or field culture, among carrots, beets, onions, etc. where the rows are planted near together. It cuts up and leaves the weeds exposed, stirs the earth very thoroughly, and performs the work better and faster than with a hoe. It is made of iron, in a strong and durable manner.

EXPANDING REVERSIBLE-TOOTH CULTIVATOR.

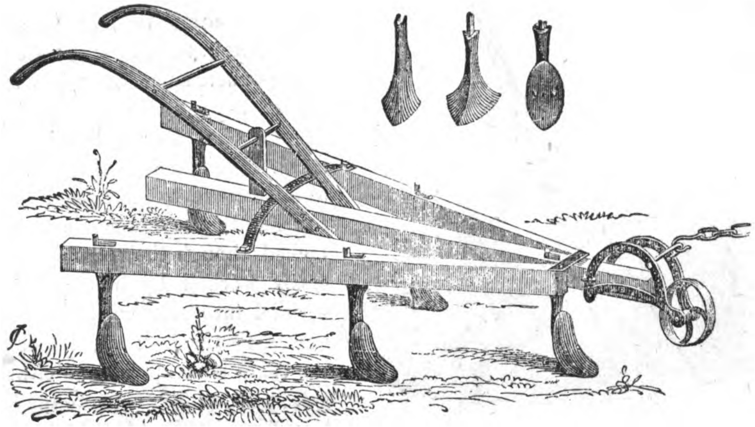


FIG. 33.

This Cultivator is made with very sharp steel teeth, so arranged as to cut up all grass and weeds, at the same time finely pulverizing the soil. It can be expanded from twelve inches to four feet. When the point of one end of the share is too much worn to be effective, the tooth can be reversed, and used as long as before. As every farmer understands the use of a Cultivator, we consider any further description unnecessary. The cuts above show the different teeth for this Cultivator.

UNIVERSAL CULTIVATOR.

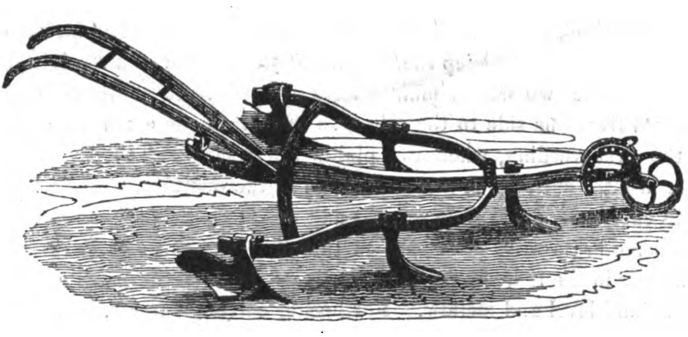


Fig. 34.

This represents a very strong iron frame Cultivator, constructed in such a manner as to do the work of plowing and cultivating or weeding at the same time. This is done by simply removing the two back teeth and putting on in their place two teeth, in form like small plows, as seen in cut; when thus altered, it thoroughly cuts up all the weeds in the centre of the rows, and, at the same time, plows to or from the hills, as the operator may desire; the change being made by reversing the plows from right to left. It can be so expanded or contracted as to suit every width of row, and works so lightly that one horse can draw it with ease.

THE HORSE HOE.

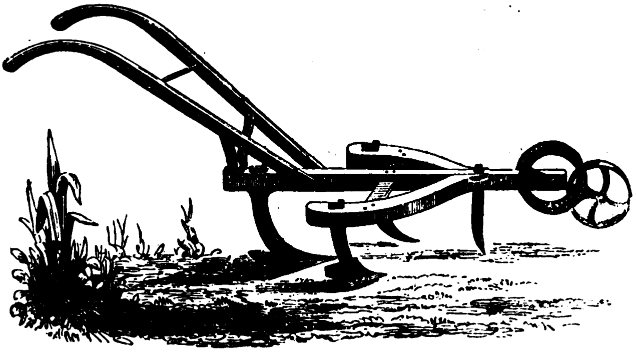


Fig. 35.

Fig. 35 represents an implement recently invented. It is designed for the hoeing or cultivation of corn, the various root crops, cotton, hops, young nurseries, and hoed crops generally; is quite light, easily managed, and of very easy draught for one horse or mule; a thorough pulverizer of the surface-soil, and exterminator of weeds and grass. The forward tooth is simply a coulter, to keep the instrument steady, and in a straight-forward direction; the two side or middle teeth are miniature plows, which may be changed from one side to the other, so as to turn the earth from the rows at the first weeding, when the plants are small and tender, or towards them in later cultivation—at the option of the operator. The broad, rear tooth effectually disposes of grasses and weeds, cutting off or rooting up all that come in its way, sifting the earth and weeds through its iron prongs or fingers in the rear, leaving the weeds on the surface to wilt and die, and the ground level and mellow. For hoeing carrots, turnips, etc., where the rows are narrow, the side teeth are taken out, and the rear tooth, with the forward one as a director to guide the instrument, hoes and mellows the ground between the rows very perfectly. The mortises in the frame or wood-work of this implement are adapted to receive the kinds of teeth used in the Expanding and Reversible Tooth Cultivator.

COTTON SWEEP.

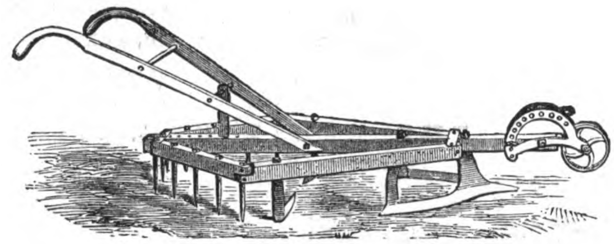


FIG. 36.

This represents a Cotton Sweep, made expressly for the cultivation of cotton and tobacco in the Southern States and South America, where it has been extensively used and is much liked. The forward or triangular share, works the ground 14 to 18 inches wide; the next succeeding teeth are made of flat bars of iron, with front edge sharpened and turned upward at the bottom, placed level with the share or sweep, in such a manner as to cut to the point marked by the sweep, thus making a clean cut of 24 to 32 inches; and the small pointed harrow teeth follow, more perfectly pulverizing the soil and working the weeds to the top, in such a condition that they are killed by the sun. This implement can be expanded or contracted, at pleasure.

LONG ISLAND CULTIVATOR.

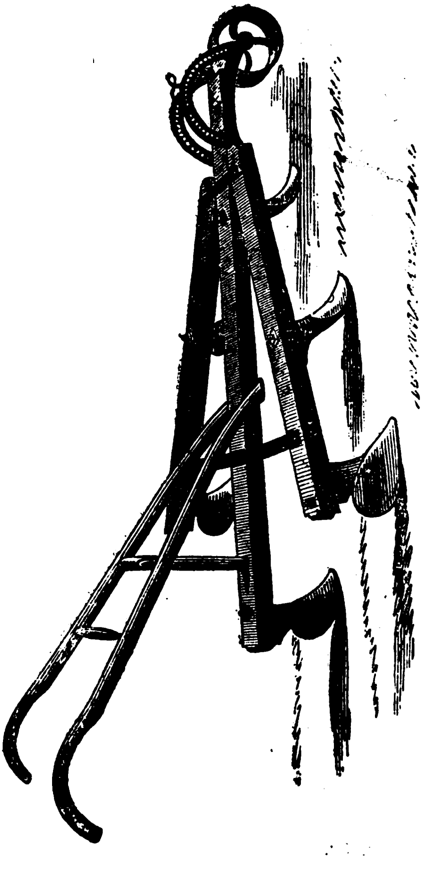


Fig. 37.

Fig. 37 shows an improved, reversible, steel tooth Cultivator, so made as to be used with right and left shares, and double mould-board, in connection with the ordinary steel teeth; or, as a simple cultivator. In principle, it is very similar to the Universal, on page 33. With the various changes which can be made by the use of the different teeth, etc., a number of valuable implements can be formed on the same frame; which is mortised to receive any of the teeth shown on the three following pages. It can be so arranged as to make a most excellent weeder and hoe, or a double mould-board plow, for covering up or plowing potatoes, etc. Can be set any width, from 12 inches to 4½ feet.

We know of no implement more generally useful to the farmer than this. With one man and a horse, more and better work can be done with it than by six hands with common hoes or a one-horse plow.

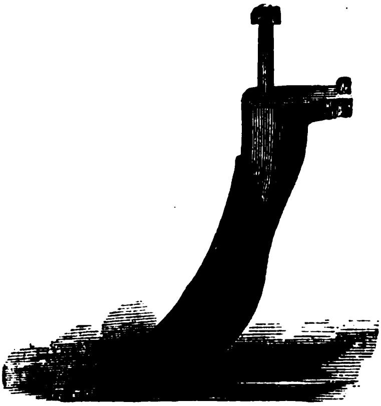


FIG. 38.

One-Horse Bolt Standard Tooth.

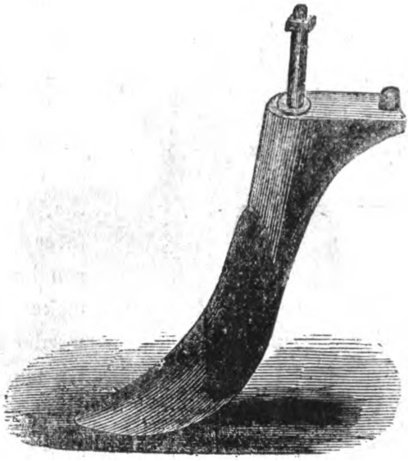


FIG. 39.

Two-Horse Bolt Standard Tooth.

Figs. 38, 39. Reversible Steel-pointed Cultivator Teeth, with bolts and nuts, for one or two-horse Cultivators, as seen on opposite page.

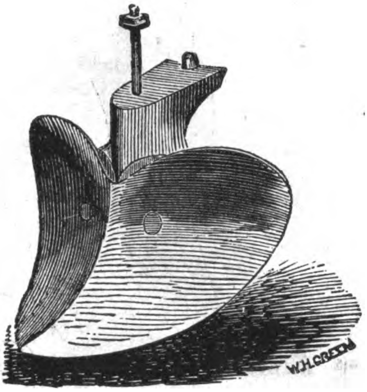


FIG. 40.

Double Tooth No. 1.

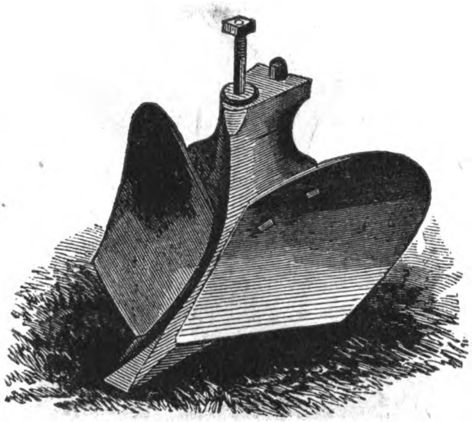


FIG. 41.

Double Tooth No. 2.

Figs. 40, 41. Steel Double Mould-boards, with cast standards and bolts, for Long Island Cultivator, seen on page 35.

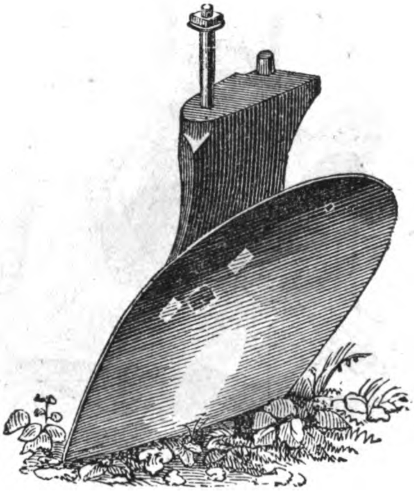


FIG. 42.

Left Hand Tooth.

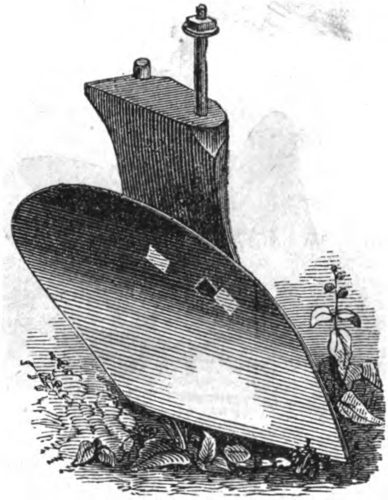


FIG. 43.

Right Hand Tooth.

Figs. 43, 44. Steel Right and Left Shares, with cast standard and bolt. See fig. 37.

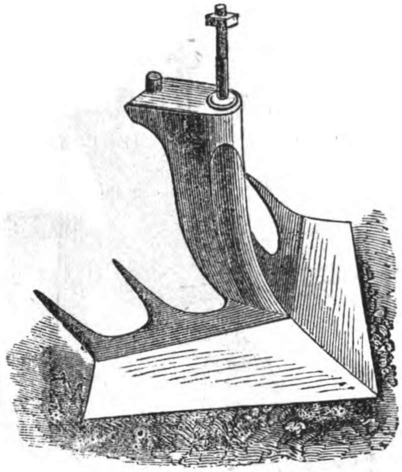


Fig. 44.

WEEDER.

Fig. 44. Cast bolt Standard Weeder, with steel share, for Long Island and other Cultivators.

HORSE HOE AND WEEDER.

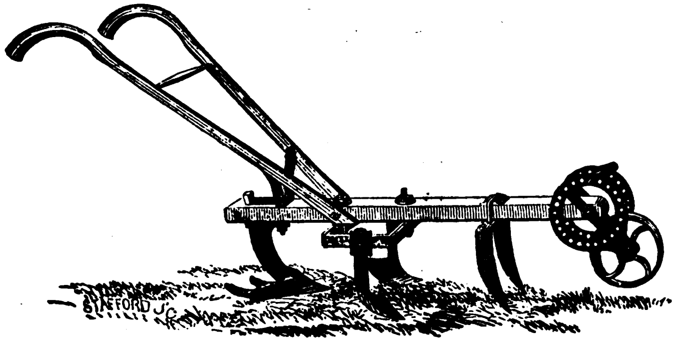


Fig. 44½.

This is a very useful implement, somewhat similar to that described on page 33—differing, in that it has two, instead of one, coulter in front, to loosen the earth and steady the machine; and, also, that the side moulds contract or expand in a straight line, being on a square frame. It is very efficient, and well made. All the iron-work, except the wheel, being wrought, and the edge of the weeder of steel. Its operation is precisely the same as that of the Horse Hoe, previously illustrated.

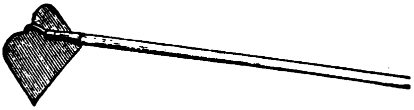


Fig. 45.

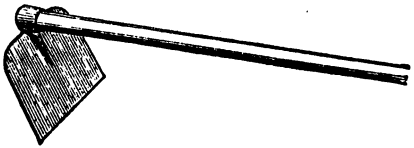


Fig. 46.

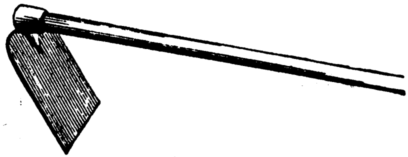


Fig. 47.

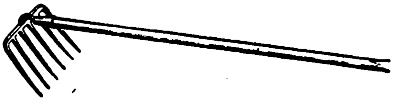


Fig. 48.

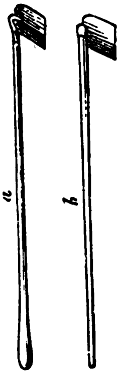


Fig. 51.

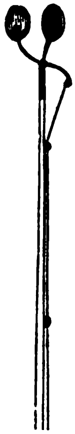


Fig. 51½.

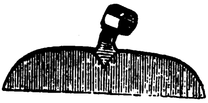


Fig. 52.

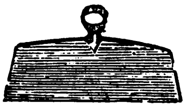


Fig. 53.

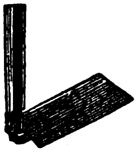


Fig 49.

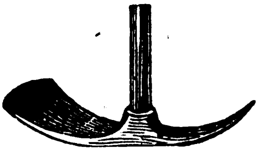


Fig. 50.

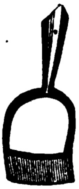


Fig. 54.

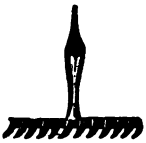


Fig. 55.

Fig. 45. Street Hoe.
Fig. 46. Planter's Hoe.
Fig. 47. Bog Hoe.
Fig. 48. Potato Digger.
Fig. 49. Grub Hoe.
Fig. 50. Hoe Mattock.

Fig. 51. Field Hoes.
Fig. 51½. Snuff-box Fruit Picker.
Fig. 52. Onion Hoe.
Fig. 53. Turnip Hoe
Fig. 54. Shove Hoe.
Fig. 55. Garden Rake.

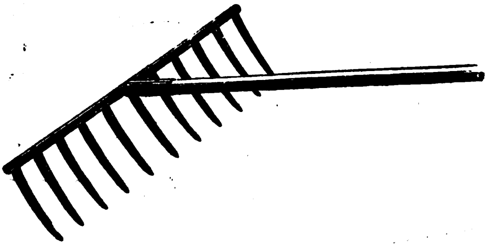


FIG. 56.

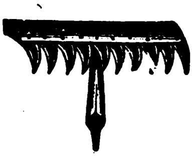


FIG. 57.

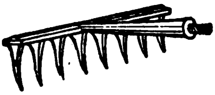


FIG. 61.

FIG. 58.

FIG. 59.

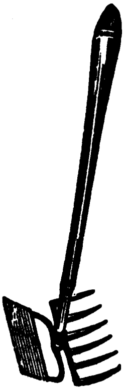


FIG. 60.

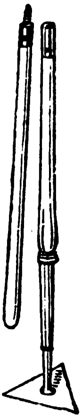


FIG. 62.

Fig. 56. Garden Rake.

Fig. 57. Lawn Rake.

Figs. 58, 59. Manure or Stable Forks, assorted sizes.

Fig. 60. Floral Hoe and Rake.

Fig. 61, 62. Tree Scraper and Garden Rake combined.

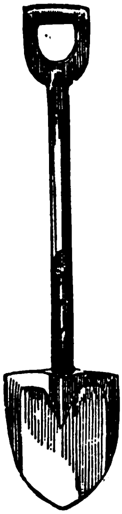


FIG. 63.

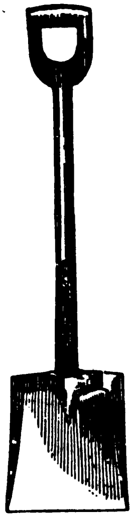


FIG. 64.

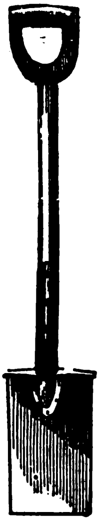


FIG. 65.

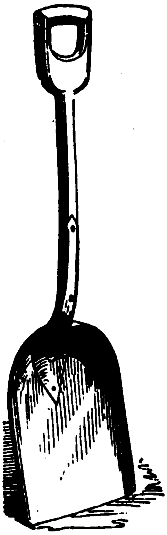


FIG. 66.

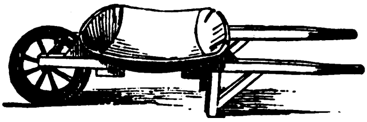


FIG. 67.

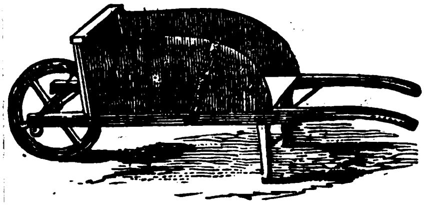


FIG. 68.

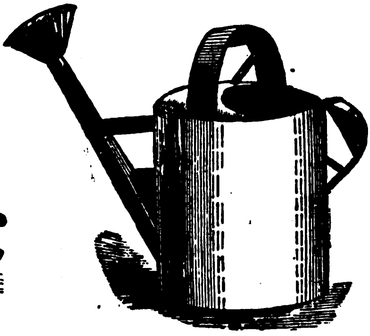


FIG. 69.

Fig. 63. Round point Shovel, all kinds and sizes.

Fig. 64. Square point Shovel, all kinds and sizes.

Fig. 65. Spade, all kinds and sizes.

Fig. 66. Grain Scoop, all kinds and sizes.

Fig. 67. Canal or Dirt Barrow.

Fig. 68. Garden Barrow, 3 sizes.

Fig. 69. Watering Pot, 6 sizes.

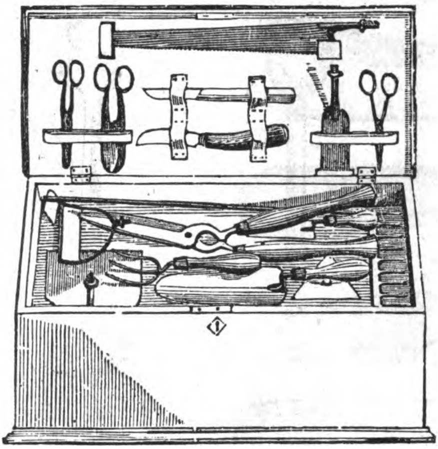


FIG. 70.

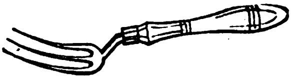


FIG. 71.

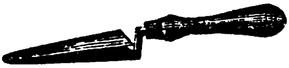


FIG. 72.

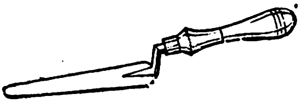


FIG. 73

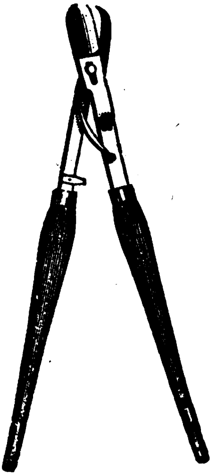


FIG. 74.

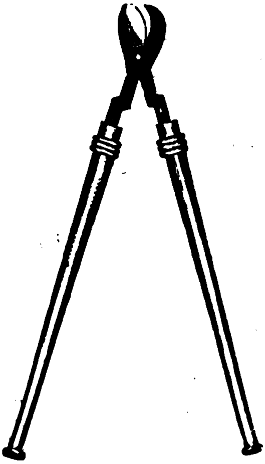


FIG 75.

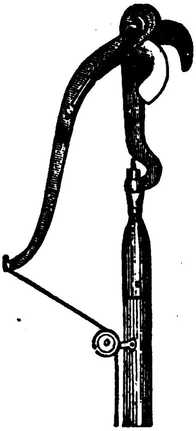


FIG. 76.

Fig. 70. Horticultural Tool Chest.
Fig. 71. Transplanting Fork.
Fig. 72. Transplanting Trowel.
Fig. 73. Weeding Trowel.
Fig. 74. Slide Pruning Shears.
Fig. 75. Lopping Shears.
Fig. 76. Pole Pruning Shears, or Avarancator.

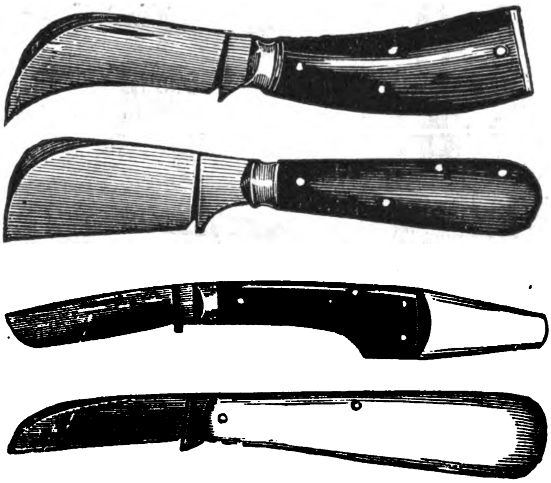


Fig. 77.

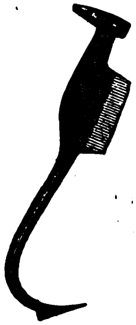


Fig. 78.

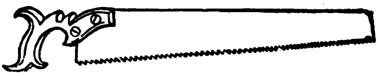


Fig. 79.

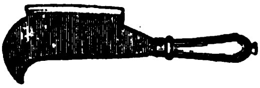


Fig. 80.

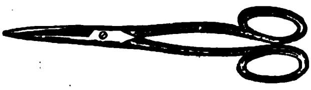


Fig. 81.

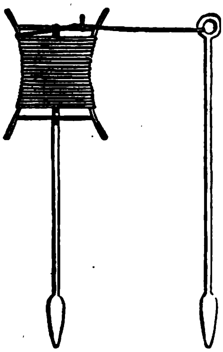


Fig. 82.

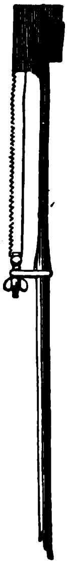


Fig. 83.

Fig. 77. Pruning and Budding Knives.
Fig. 78. Grafting Chisel.
Fig. 79. Pruning Saw.
Fig. 80. Bill Hook.
Fig. 81. Vine Scissors.
Fig. 82. Garden Reel and Line.
Fig. 83. Pruning Saw and Chisel.

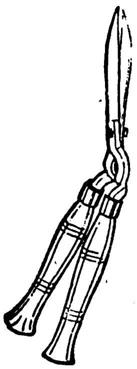


FIG. 84.

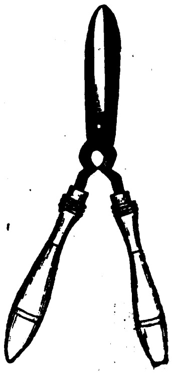


FIG. 85.

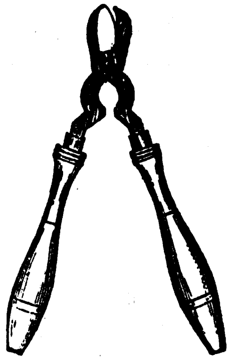


FIG. 86.

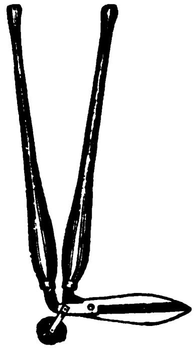


FIG. 87.

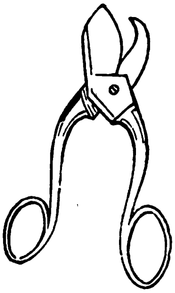


FIG. 88.

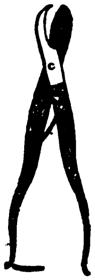


FIG. 89.

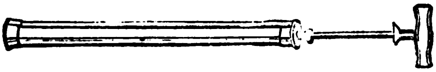


FIG. 90.

Fig. 84. Box, or Hedge Shears.
Fig. 85. Box, or Hedge Shears, with Pruning Notch.
Fig. 86. Ladies' Pruning Shears.
Fig. 87. Border Shears.
Fig. 88. Pruning Scissors.
Fig. 89. Sliding Pruning Shears.
Fig. 90. Garden Syringe.

WEATHER VANES.

Of these we have many different patterns suitable for all places where such a thing is needed.

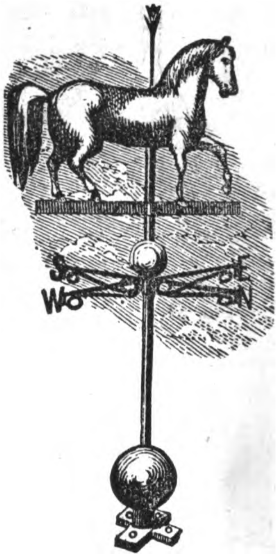


FIG. 92.

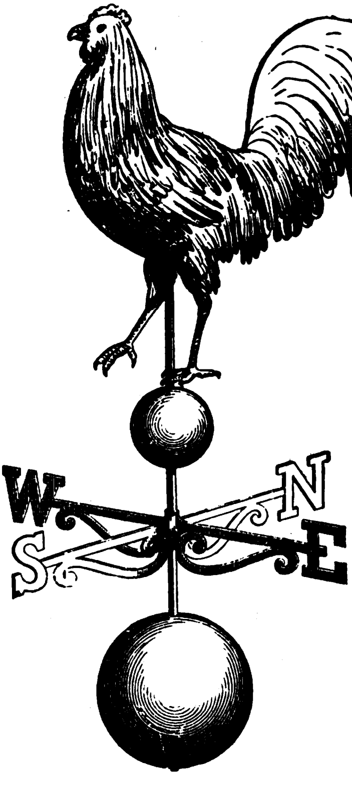


FIG. 91.

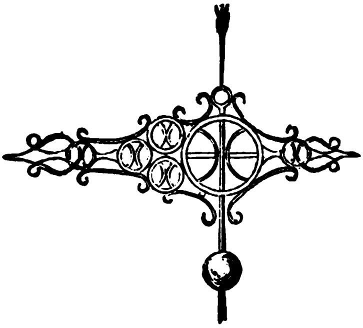


FIG. 93.

Fig. 91. Cock, of cast iron (large size), two balls; points of compass in gold leaf.
Fig 92. Cast Iron Horse, with two balls; points of compass in gold leaf; length 36 inches.
Fig. 93. Open Work, of cast iron; 64 inches long, with two balls; points of compass in gold leaf.

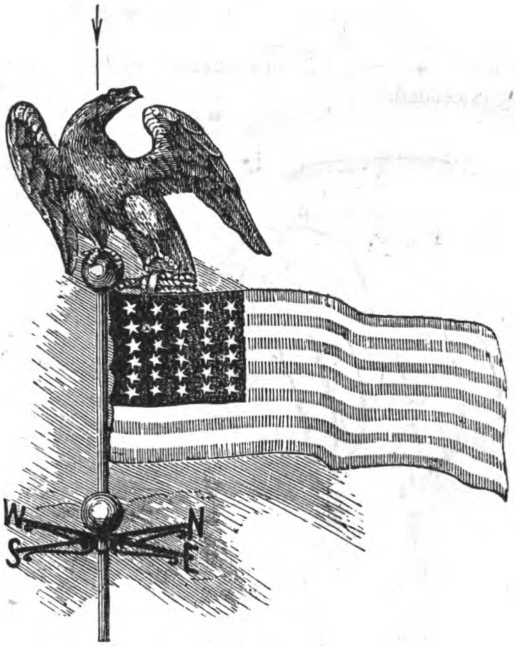


FIG. 94.

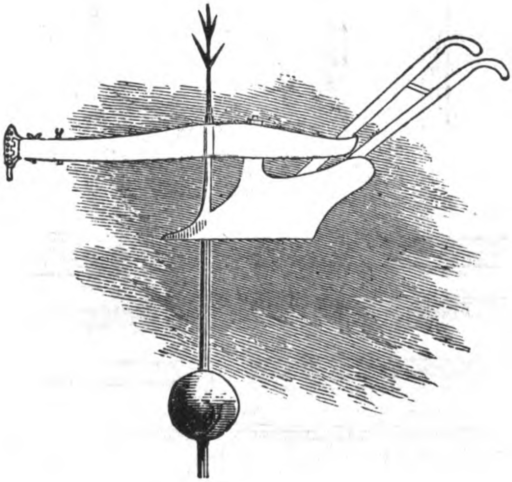


FIG. 95.

Fig. 94. American Eagle. Sheet iron, in colors.
Fig. 95. Plow. Of sheet iron, in gold leaf.

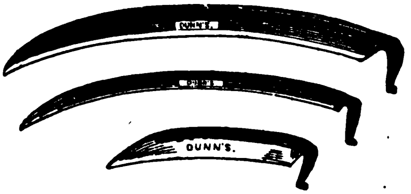


FIG. 96.

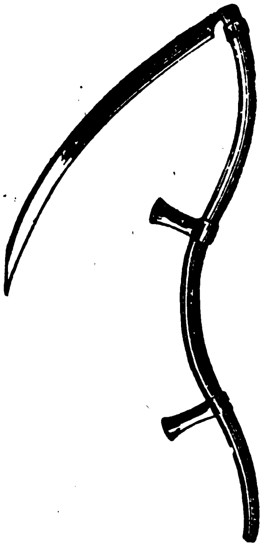


FIG. 97

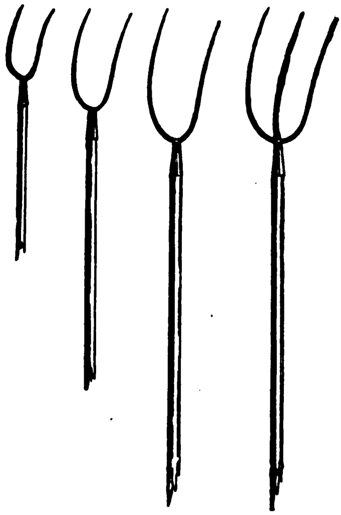


FIG. 98.

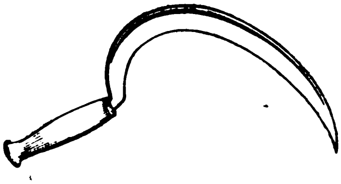


FIG. 99.

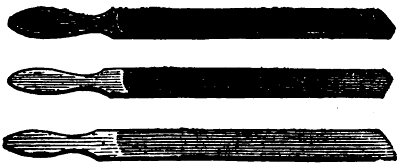


FIG. 100.

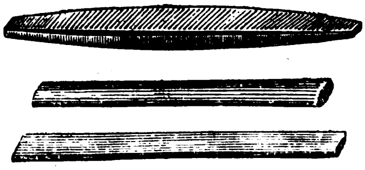


FIG. 101.

Fig. 96. Cradle, or Grain Scythe; Grass Scythe; Bush or Bramble Scythe.

Fig. 97. Grass Scythe, with handle.

Fig. 98. Hay Forks, assorted sizes.

Fig. 99. Grass Hook. " "

Fig. 100. Emery Rifles, for sharpening scythes.

Fig. 101. Scythe, or Whetstones.

GRAIN CRADLE.

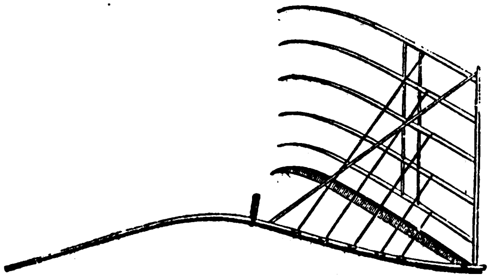


FIG. 102.

Of this useful harvesting implement we have a great variety of styles and qualities, with wood and iron braces, four, five and six fingers, patent nib and thumb screws; so made that they can be taken apart and closely packed for shipping, in boxes of one or two dozen in each. In our stock will be found those made by the best manufacturers—Grant, Cass, Wilcox, Breed, Blanchard, Wilkinson and others.

HAND HAY RAKE.

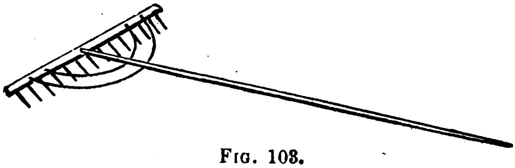


FIG. 103.

This is an indispensable implement in the hay or harvest field. We have them with two and three bows, eight and ten teeth, of every style and quality made.

REVOLVING HORSE HAY RAKE.

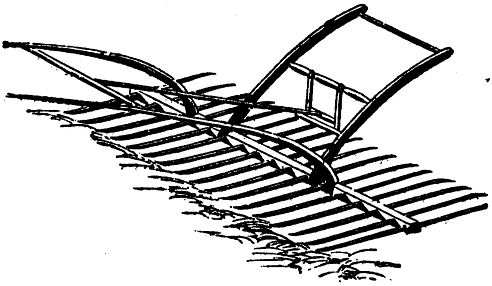


FIG. 104.

We make these with round and square teeth, and of various lengths—8, 9, 10, 11, 12 feet heads.

MANNY'S

PATENT ADJUSTABLE, COMBINED

REAPER AND MOWER,

WITH WOOD'S IMPROVEMENT.

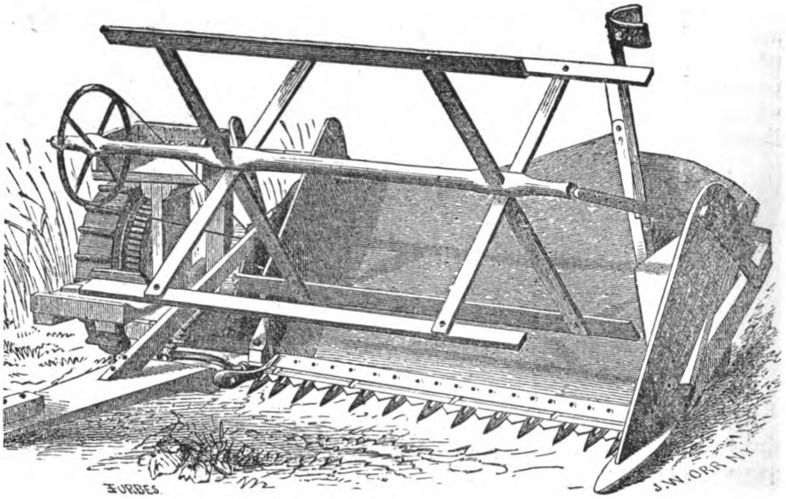


FIG. 105.

Many thousands of these machines have been built and sold in the United States, the past season, and they have everywhere sustained their former well-earned reputation, as being the most successful combination of Reaper and Mower now in use. In all trials with other Machines, it has proved itself superior in the following points: lightness of draft, and freedom from side draft; ease in backing and turning corners; its adaptation to uneven surfaces, its adjustability to various heights of cutting, its portableness from field to field, on its own wheels; its superior cutting apparatus, entirely obviating the clogging of the knives in any kind of grass; its construction for strength and durability, and for being best adapted to the wants of the farmers of this section of country.

The efficiency and superiority of this machine, in the execution of its work, over hand labor, is now fully admitted by every one; and it has, in all, received over ninety first-class premiums in the last three years.

Latterly, the tendency has been to perform as much of the labor of the farm as possible by machinery; and it has been easy to see, that the scythe and the cradle would soon follow those rude implements of a former generation, which the spirit of improvement has compelled us to lay aside.

The. Reaper and Mower has now become as necessary to economical farming as any of the improved implements which mechanical science has placed within our reach; and such is the perfection to which the Manny Machine has been brought, that we now feel warranted in calling it a

STANDARD MACHINE FOR CUTTING GRAIN AND GRASS.

The machines for the coming harvest will be built of the best eastern oak and ash, and of workmanship to excel anything heretofore seen in this class of machinery; and the farmers may purchase them with the fullest assurance that they are getting a machine complete and perfect in every respect. They are warranted to cut from ten to fifteen acres of grass or grain per day, as well as can be done with the scythe or cradle.

TREDWELL & PELL,

AGENTS FOR THE MANUFACTURERS,

251 PEARL STREET, NEW YORK.

A constant supply of extras always on hand, to fit all Mowing and Reaping Machines sold in this market.

GALE'S

IMPROVED

MOWING AND REAPING MACHINE

COMBINED.

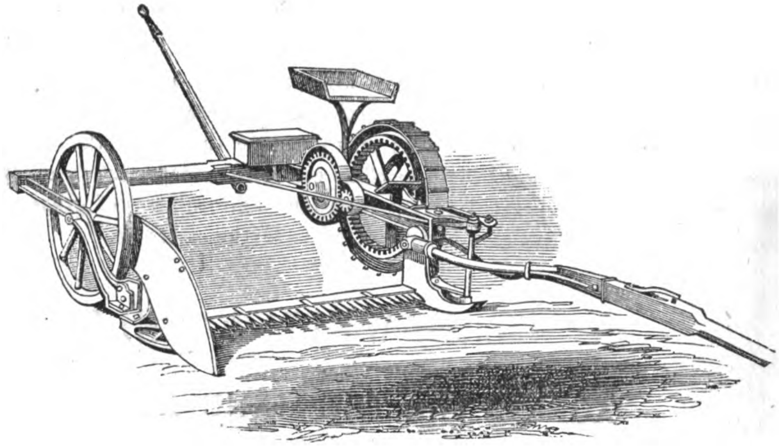


FIG. 106.

Gale's Mowing Machine will be offered to the public as a Mower, or a Mower and Reaper combined, with confidence that it is the most perfect Machine in use; being durable, and nothing about it that any farmer, with prudent use, can get out of order. It has many advantages over all others in use.

1st. The only weight upon the team is holding the end of the pole—and oxen can be used, if wished.

2d. The frame of this Machine being square, and swinging upon two axles, the cutter adjusts itself to the make of the ground.

3d. The driving wheel runs to the side of the standing grass, in the space opened by the track clearer, running upon the stubble, instead of the mown grass, as is the case with all others in use; making this machine 3½ feet narrower than all others cutting the same width of swath.

4th. It can be worked easier with one horse than others with two.

5th. This machine is lighter than any other in use.

6th. Having a lever attached to the rear of the machine, you can raise the cutter at pleasure to clear any obstruction, instantly dropping when over.

7th. The scythe can be changed in an instant.

8th. The driving and counter wheels being both of one size, it can be drawn as a cart, and will pass through any ordinary bars or gate without the difficulty of taking the machine apart.

9th. Being geared wholly with spur gearing, it runs much easier than bevel gearing, and renders it less liable to get out of order.

10th. Having a balance wheel outside the driving wheel, to which the connecting rod is attached; making the draught easier when the machine is at work, and renders it capable of cutting any kind of grass; and the machine can scarcely be heard when at work.

11th. The gearing of this machine being hung upon an entirely iron frame, renders it free from warp, from wet or from the heat of the sun, to which all mowing machines are exposed; and the journals of this machine are all run in Babbett's Metal, which prevents their cutting when dry.

12th. The connecting rod of this machine works level with the centre of the frame, and the joints of the rod are made in such a manner as to work perfectly free and easy.

13th. The cutter bar is held at both ends in the frame, and forming the front of the frame of the machine, it will cut more grass or grain than any other machine in use, with the same power applied, and will spread the grass for curing equal to any other.

14th. This machine has less side draft than other machines.

15th. The knives will be made of the first quality cast steel, and properly tempered.

16th. The machines will be made in the best manner, and of the best materials.

17th. These machines have been used during the mowing seasons of 1855 and 1856, and have given entire satisfaction.

In addition to the foregoing, we shall constantly keep on hand a good assortment of the different kinds of improved Machines that may come into the market. Extras always on hand.

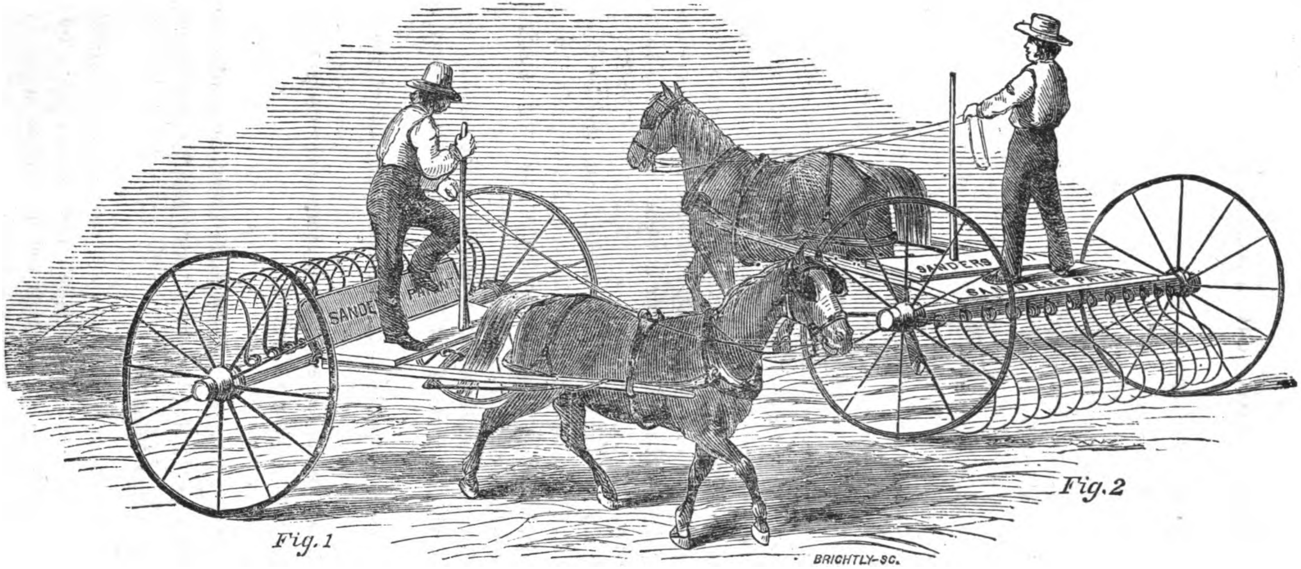


FIG. 107.

SANDERS' PATENT STEEL-TOOTH, SELF-DELIVERING HORSE RAKE.

With this Rake, a man and horse will rake more hay than twenty men in the same time. The cut is the best description which can be given.

HORSE HAY FORK, OR ELEVATOR;

FOR UNLOADING HAY.

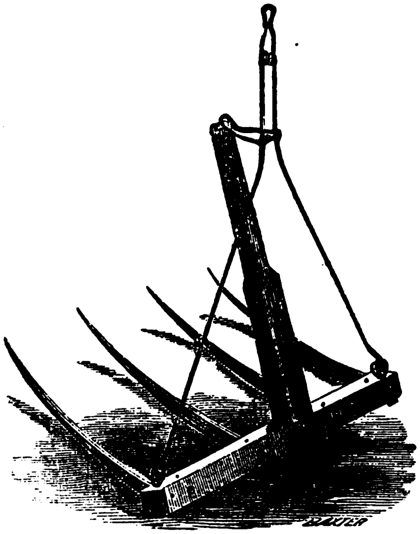


Fig. 108.

The above simple implement for removing hay from the wagon and depositing it in the mow, is getting into general use; and, doubtless, the day is near by when no barn will be unprovided with one of these cheap, labor-saving contrivances. There is probably no toil to which farm hands are subject, greater than unloading hay in haying season; and the necessity for "making hay while the sun shines," necessarily requires extra exertion; hence, the hands are exhausted by the effort, and return to the fields worn out and unfit for labor.

By the use of this simple and low-priced apparatus, a two-horse wagon-load may be unloaded and deposited in the mow, just where it is needed, within ten minutes; and if unusual exertions be made, to avoid a threatened storm, in half that time, the workmen being fresh, and ready for reloading.

We would, however, caution farmers against the purchase of low-priced blocks. The best anti-friction are the cheapest, and cannot take fire. Let them look to this, and be not deceived by the misrepresentations of those whose interest it may be to sell an inferior article.

FARM AND PLANTATION CARTS AND WAGONS.

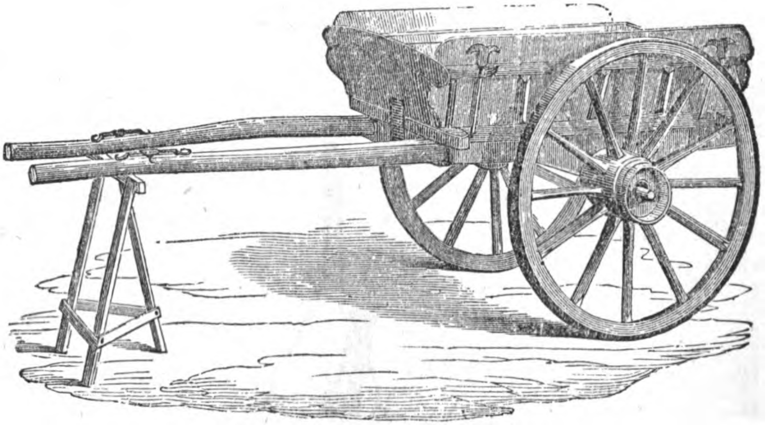


FIG. 109.

We make a variety of styles of Carts and Wagons, for farm and plantation use; also, Cane Carts, and Timber Trucks, with hoisting screws, for removing logs and heavy articles. Carts, Wagons and Trucks of any description furnished to order.

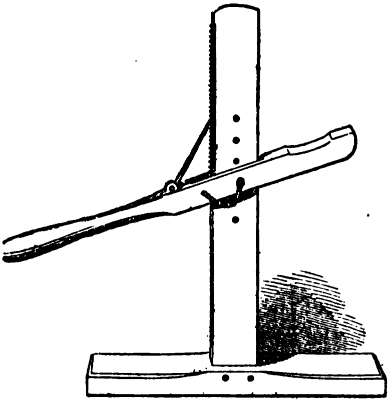


FIG. 110.

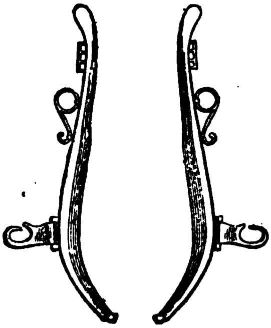


FIG. 111.

Fig. 110. Wagon Jack. This is a very simple contrivance for raising cart axles, when removing the wheels for the purpose of greasing.

Fig. 111. Cart or Mule Hames, all sizes.

EMERY'S

PATENT CHANGEABLE HORSE-POWER AND THRESHER,

FOR ONE OR TWO HORSES.

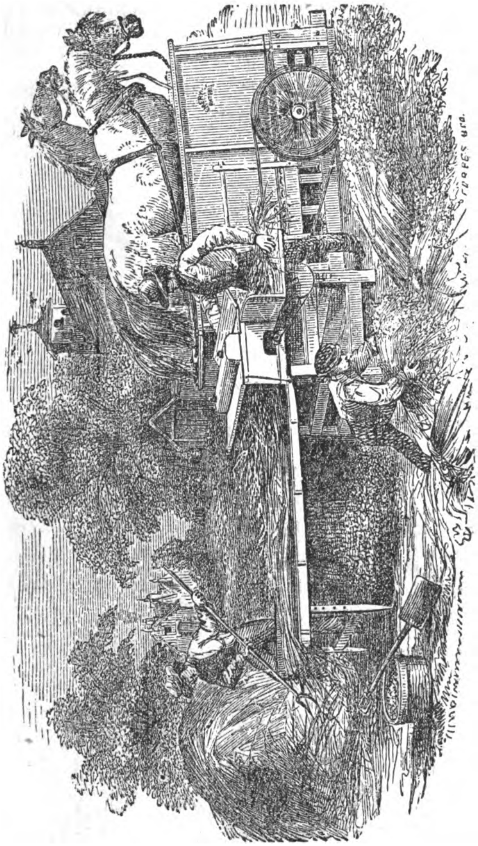


Fig. 112.

Designed expressly for farm, plantation, and other uses. It is one of the most valuable labor-saving machines ever introduced to the planter or farmer, for threshing grain, grinding feed, sawing wood, cutting hay and stalks, pumping, driving fan-mills, corn-shellers, churning butter, and every other purpose to which horse-power can be applied.

Many thousand sets of these machines are in successful operation in all parts of the country, and give entire satisfaction. Valuable improvements have lately been made in this machine; and, as now sold, it admits of several changes of speed and power, increasing or diminishing the velocity, to adapt it to the various purposes for which it may be wanted.

WARRANTY, CAPACITY, ECONOMY, ETC.

The Two-horse Power and Thresher, as represented above, is capable, with three or four men, of threshing from 175 to 225 bushels of wheat or rye, and the One-horse Power from 75 to 125 bushels of wheat or rye; or, both kinds of Powers, etc., are capable of threshing double that amount of oats, barley, or buckwheat, per day, of ordinary fair yield. If the crops be extraordinarily heavy or light, greater or less results will follow.

These Power Threshers, etc., are warranted to be of the best materials and workmanship, and to operate as represented, to the satisfaction of the purchasers, together with a full right of using them in any territory of the United States, subject to be returned within three months, and home transportation and full purchase-money refunded, if not found acceptable to the purchasers.

EMERY'S

PATENT

COMBINED THRESHER AND CLEANER.

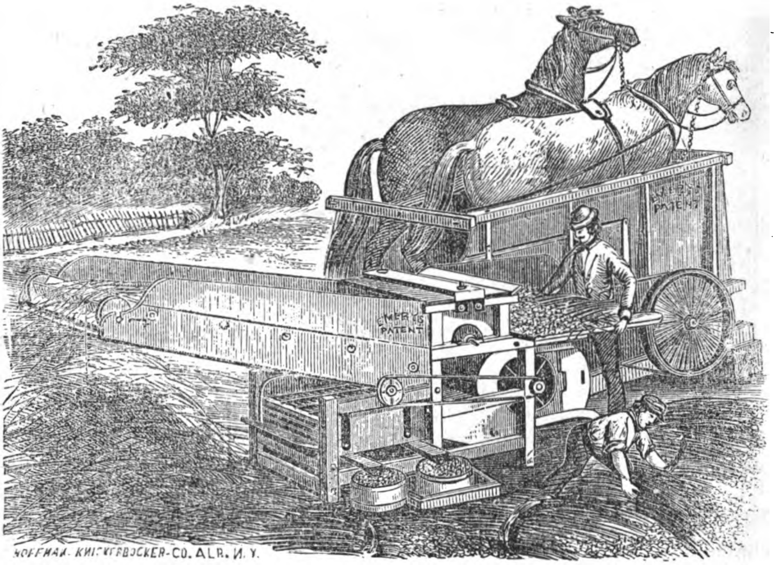

EMERY'S PATENT
EMERY'S PATENT
HOFFMAN. KNICKERBOCKER-CO. ALB. N. Y.

FIG. 113.

This machine is the result of many years of experiment and improvement; the aim of the proprietors has been:

1st. To produce a machine capable of threshing and cleaning, at one operation, fit for market, a satisfactory quantity of any kind of grain, with little or no waste.

2d. To adapt it to be operated with their endless chain Two-horse Power, as well as by any good lever power with four, six, or eight horses, and so to simplify its machinery and arrangement that it might be easily adjusted, and kept in order or repaired, by workmen of ordinary skill.

3d. To produce a machine that could be operated by few hands, so that a person owning one could use it at his own pleasure or convenience, with his own team and workmen.

4th. To make it as small and of as little weight as possible, having the necessary strength, and allowing proper room for the full operation of all its parts, but having no waste room or useless bulk and weight of materials, so that it might be used in a barn of ordinary size, if required, or be easily transported from place to place; and, also, so that the freight to distant places should be kept within proper limits.

5th. To bring the cost of the machine within the means of any one having use for the same.

They believe that the machine, as now constructed, possesses to a superior degree these very desirable qualities, and that it will commend itself to all, on a fair test of its capabilities, and careful examination of its construction and workmanship.

When properly adjusted and operated, it will thresh clean and make thorough separation of the grain from the straw; will deliver the grain as clean as the common fan-mill, under ordinarily favorable circumstances, with two horses, at the rate of from 15 to 25 bushels of wheat, rye, etc., or double that quantity of oats or buckwheat, per hour; depending upon the kind, quality and condition of the grain.

It runs easily with two horses, and may be operated by from three to five men, according to the conveniences of the place where used, or the disposition made of the straw.

All its parts are readily accessible for oiling, adjusting, or repairing, in case of accident.

It requires no more room to operate than the common Thresher and Separator, can be loaded inside the Horse Power, and, by having the Power itself mounted on wheels, the whole, weighing about 2300 pounds, may be drawn from place to place by the same team that is used in threshing.

When the Power is so mounted, the whole machinery, after arriving at the place for operation, may be set up ready for use in less than thirty minutes, in favorable situations, and by persons familiar with the business.

All the pulleys, table-boards, grain-spouts, etc., are easily changeable from side to side, so as to accommodate various situations. It may, therefore, be belted from either side of the Horse Power, which is itself also changeable from side to side. The separating endless chain or apron is constructed on a new and improved plan, making a more complete separation than any before made. The cleaning riddle is also made on an entirely new plan, and, being of very large size, exposes the grain and chaff to the blast in the most favorable and complete manner. The cleaned grain is delivered from one spout, and the tailings from another.

Complete directions for setting up and adjusting the machine will be sent with each one. These machines are warranted to operate as described, and to be made of the best materials and workmanship.

Top View of the Running Gear, and a portion of the Frame Work of H. L. Emery's Patent Changeable Railroad Horse Power.

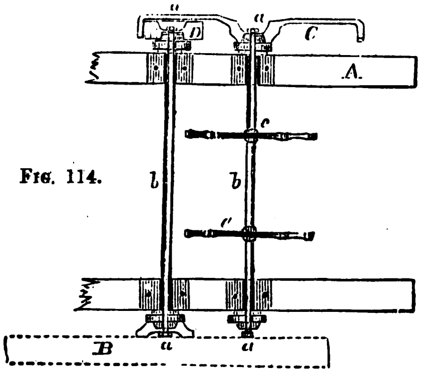


FIG. 114.

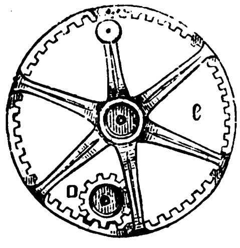


Fig. 116.

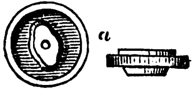
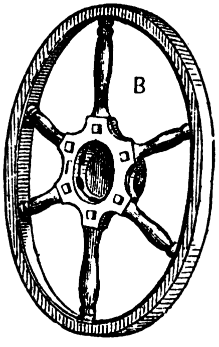


FIG. 115.



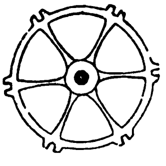


FIG. 117.

FIG. 118.

Fig. 114. A A—Main sills or timbers of the Power, supporting the shafts. B—Band pulley upon one of the shafts. C—Converge or internal gear upon the main shaft, and working into and over the pinion. D—Pinion, or small gear, upon the same shaft with pulley. b b—Main

and counter shafts of Power. c c—Reels upon the main shaft, which support the endless flooring in its circuit, and propel the shaft. a a a a—Couplings upon the ends of the shafts, fitting all the pulleys and gears.

Fig. 115. Side and edge view (enlarged) of the couplings.
Fig. 116. Side view of converge or internal gear and pinion.
Fig. 117. Side view of one of the two reels (c c) on the main shaft.
Fig. 118. B represents the band pulley.

The power of the revolving platform being applied to the main shaft, by means of reels of large diameters, the stress upon the several parts is in no way as great, and the liability of wear or breakage, from use or accident, is removed. The whole of the gearing is removed from under the horses to the outside of the Power—free from dirt, dust, etc., and always easily kept in order or cleaned, which is an advantage over all other Powers. This Power has also the advantage of the changing of force and velocity to accommodate it to any variety of work, without any additional cost or danger to the gearing or other parts. When the main shaft makes but 56 revolutions per minute, the diameters of the gears are such as to increase the velocity to 224 or decrease it to 14 revolutions per minute, when the animals (either horses or oxen) walk but two miles per hour—being about two-thirds the travel which is necessary with the best of other Powers to produce the same effect. This last fact is one of its principal features, and of the greatest importance to the farmer. The gearing, as well as pulleys and couplings, all agree, and can instantly be transposed, each to each and side to side. In this Power, the centres of motion of the gears are always in the same position to each other, requiring no guard or binding track over the chain, to keep the gears together, as is absolutely necessary with all other Powers, and which serves to check the force of the Power; and as the driving faces of the teeth on the gears become worn off, the loss of force increases, until they eventually stop, break, or slip by each other. With the above advantages, together with the epicycloidal form of teeth, which is acknowledged by all mechanics to be the strongest and most perfect, they work with less friction and wear, as the driving surfaces present to each other a rolling instead of sliding friction; this kind of teeth, on account of their rounded form, work much deeper into each other, and have little or no inclination to lift out of gear.

CIRCULAR AND SWEEP HORSE POWERS.

TAPLIN'S

CIRCULAR HORSE POWER.

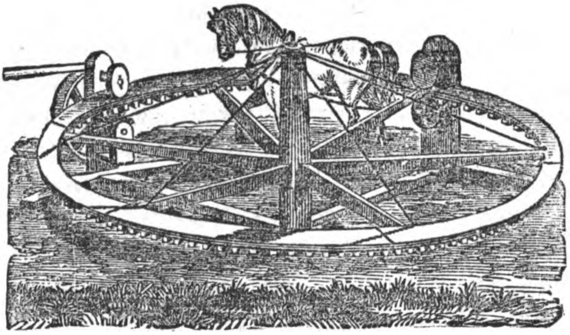


FIG. 119.

Among the many kinds of Horse Powers that we keep on hand, may be found the one represented above, generally known as the Taplin Power. This, like all other power, can be applied to any kind of machinery, and can be used with from one to four horses. They are much liked in the Southern States and in South America, for driving threshing machines, cotton gins, grinding corn, etc. They are made light and portable, and can easily be taken apart and packed for transportation. The rim or circle is made of wood, with wrought-iron gearing bolted in segments to the under side of the rim; these work into a pinion which drives the shaft, with band-wheel attached. We make two sizes, for one, two, or four horses.

SWEEP, OR CIRCULAR HORSE POWERS.

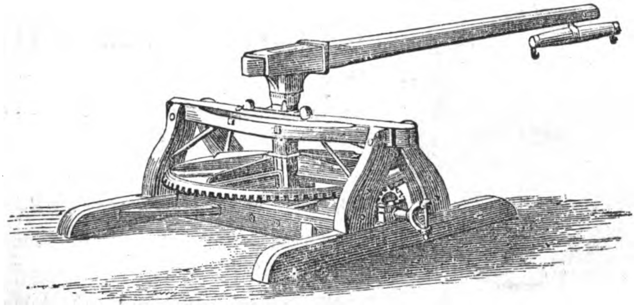


FIG. 120.

The proper application of horse power to the various machines used by the agriculturist, is an important consideration in the economical working of a farm or plantation. The cuts and descriptions of various mechanical arrangements, as seen here, are intended to give some general ideas of them. They will be found to meet most cases which arise. The above is our One or Two-horse Sweep Power, designed for pumping water, sawing wood, grinding corn, driving corn-sheller, fan-mill, or any other kind of light machinery.

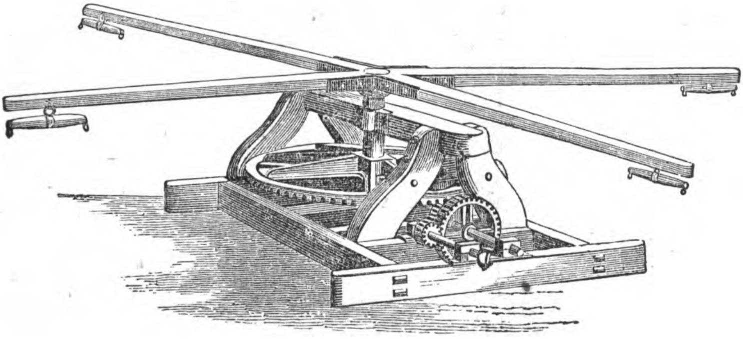


FIG. 121.

The above cut represents our Double-geared Power, for driving a threshing machine, circular saw, or any other purpose where great speed is wanted. It is very strong, compact and durable, and well calculated to drive any kind of machinery where the power of two or four horses is needed. Both Powers are so arranged that a shaft of any length can be attached at all times; thus carrying the band or driving-wheel outside the circle, so as to connect the belt to machines in any position.

CORN-SHELLERS.

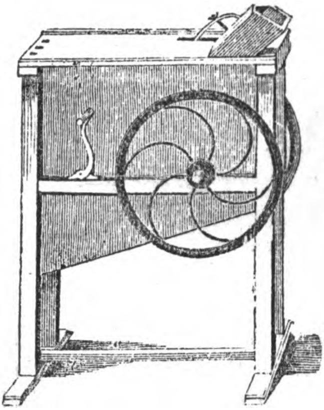


FIG. 122.

During the last few years great improvements have been made in Corn-Shellers, among which may be found the various kinds and styles represented on this and following pages. This cut shows a hand Sheller, which we believe to be one of the most efficient and durable hand machines in the market. We make them with one or two balance-wheels, and also with double hopper, so as to shell two ears at a time. With the help of a man and a boy, they will shell about 150 bushels of corn per day; and are so arranged as to shell all sized ears of corn, without breaking the grain. They are made light and strong; and for ease of operation, and amount of work, cannot be surpassed.

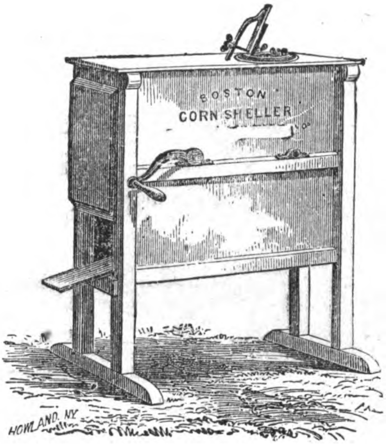


FIG. 123.

We also make a strong and durable Sheller, of the "Yankee" pattern, with iron hopper and double spring, to suit all sized ears of corn. The balance wheel is inside, and safe from injury. It is best adapted to northern corn, and warranted the most perfect article in the market. It will shell a bushel of corn easily in five minutes' time.

SOUTHERN SHELLERS.

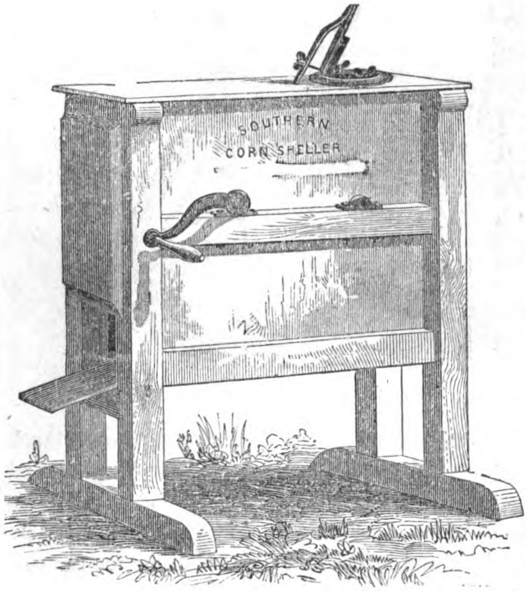


FIG. 124.

Of these, we have two sizes (double and single hopper), for hand or horse power. They are made expressly for shelling the large ears of corn that grow in the Southern and Western States. The woodwork and machinery in these Shellers are extra strong and heavy; thus making them very durable. They are well calculated for large farms or plantations, their capacity being about 300 bushels of corn per day.

SMITH'S CORN-SHELLER AND SEPARATOR.

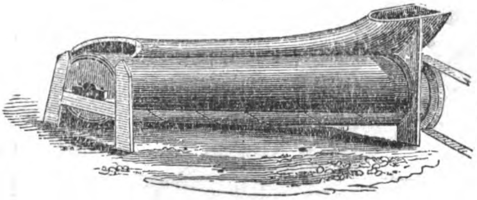


FIG. 125.

This is one of the largest and best power Corn-shellers in use. It is capable of shelling from 1,200 to 1,500 bushels of corn in ten hours. It is about six feet long, by two feet high; is made mostly of iron, easily managed, and not likely to get out of order. Many hundreds of them are in use, and much approved. This shells and separates the corn from the cob, and where a large amount of work is to be done, there is no better machine to be had. We have three sizes, to be driven by one or two-horse power.

Full directions for working accompany each machine.

VIRGINIA CORN-SHELLER.

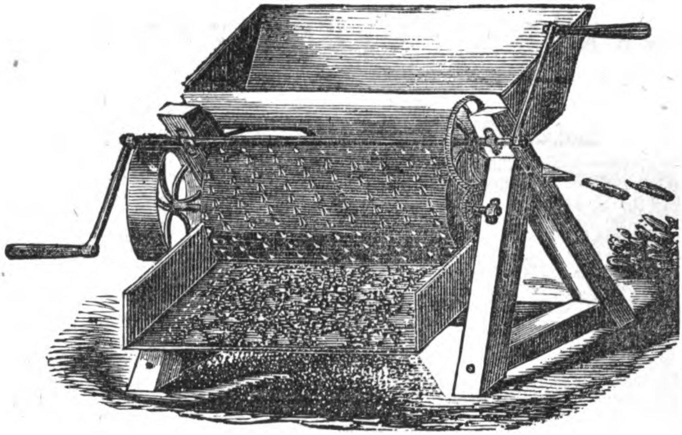


Fig. 126.

This machine has been long in use in the Southern States, and is much liked. It is a very strong, powerful Sheller, well adapted for Virginia and Maryland crops; can be worked by two men, or other power, and will shell from 400 to 600 bushels of corn per day, separating it from the cob, both of which are left unbroken, and in the best possible order for the mill or market. For its size, we consider it one of the best Shellers in use.

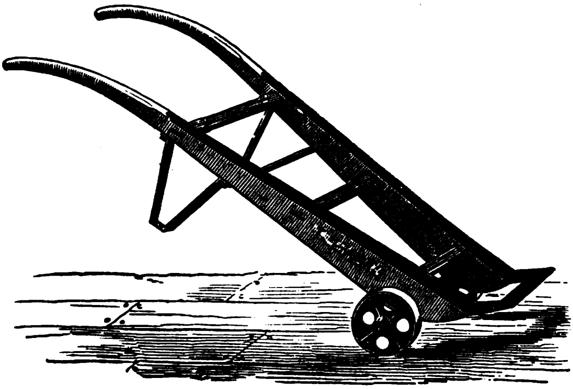


Fig. 127.

TRUCK—For use in stores, on wharfs, plantations, etc.; for trucking boxes, barrels, cotton, and other articles. We make six sizes.

GRANT'S PATENT FAN-MILL.

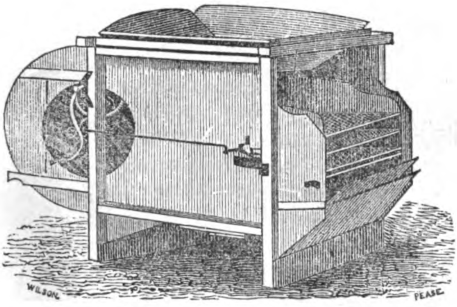


FIG. 128.

This cut represents the best Fan-mill known in the country, for cleaning all kinds of grain and seeds. These Mills will chaff and screen wheat, rye and barley at the rate of one bushel per minute, taking out all the chess, cockle and smut at the same time; being the only Mill that will do this at one operation. (With all other Mills it requires two operations to perform the same labor.) They also clean all other kinds of grain, by once running through. Coffee and rice may be cleaned by them in the best manner. They are very simple in construction, easily managed, and not likely to get out of order; are as compact as practicable for the purposes designed; are substantially constructed, and may be readily and safely transported to any part of the world. Their capacity for work is not equalled by any other Mills. We make six sizes, Nos. 1 to 6.

In addition to the above, we manufacture a Fan-mill expressly designed for cleaning rice and coffee; which also separates the different sizes of coffee, and places each size in a different apartment, cleaned, ready for market. This is a great improvement in Fan-mills, over all others now in use. We have sent many hundreds of these Mills to the West Indies and South America, for the above purpose, and they have invariably given entire satisfaction. All the above patent Mills have seven different sizes of sieves.

We also manufacture eight sizes of Fan-mills with four sieves each, numbering from No. 00 to No. 6. They are calculated for all ordinary purposes, and cost much less than the patent Mills.

Any of the above Mills can be taken apart and boxed in a very small space, for shipment to foreign ports.

SMUT MACHINES.

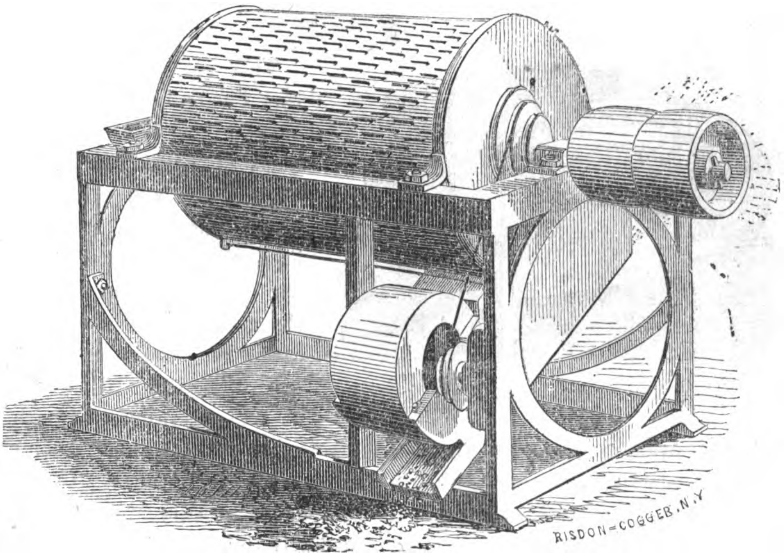


FIG. 129.

This Smut Machine, so well known in some parts of our country, requires but a trial to prove its superiority over all others. We are sending numbers of them to all parts of the United States, and they are considered by our first millers, who are using them, as being unequalled, and answering all the purposes of the most expensive contrivances of rubbing stones, screens, etc.

The grain is admitted through the hopper to the cylinder, at the left end of the cylinder (as shown in the above cut), immediately above the frame, where it is thoroughly scoured by revolving beaters in the cylinder, and the dust and smut escapes, or is blown through the perforated cover. By an arrangement of the revolving beaters (which are slightly spiral) in the cylinder, the grain is carried to the opposite end of the cylinder whence it is admitted, where it drops into the trough; and what smut, dirt, chess, or other foreign matter is contained in the grain, is there driven out by the blower, which is driven by cone pulleys, whereby the speed can be arranged for both heavy and light varieties of grain. It being made entirely of iron, all danger from fire is obviated, which makes Smutters partly constructed of wood so dangerous.

SMITH'S PATENT SMUT MACHINE.

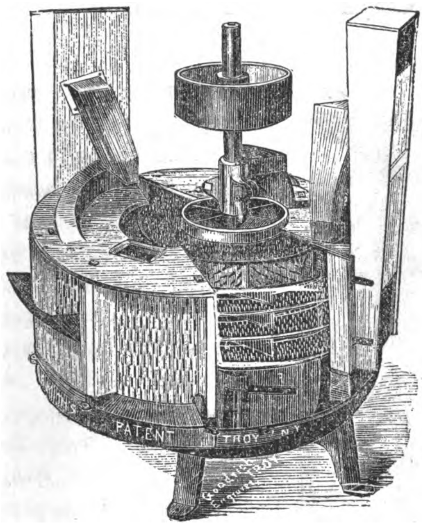


Fig. 130.

This machine, like the one represented on page opposite, is for smutting or cleaning grain previous to its being ground into flour; but, as this differs somewhat in appearance, principle, and operation from the other, we deem it expedient to illustrate each. Both are extensively used throughout the country, by millers and others, and are said to work satisfactorily.

This cut represents the Mill, with one half thrown open, showing the interior of the same. In this machine are combined all the cleaning power that can be brought to bear on grain; and the inventor is of opinion that its equal for amount of work, strength, and durability cannot be found. We have nine sizes, varying in price from eighty to two hundred dollars. The speed should be about 500 revolutions per minute.

The following table shows the different sizes, their relative capacities, etc.:

Numbers and Sizes.	Bushels per hour.	Size of Pulley.	Width of Belt.
1	15	11	4
2	25	11	4½
3	35	12	4½
4	45	12	5
5	60	14	5½
6	80	14	6
7	100	16	7
8	125	16	8
9	150	16	9

WARRANTY AND TERMS OF SALE.

The Machine will be sent to order, and warranted to excel all others now in use, in taking out smut and chaff, and scouring the fibres from one end of the berry and the "germ" from the other. A trial of three months will be given, from the day of shipment, and if the same does not operate as warranted, the Machine will be taken back and the purchase-money refunded.

FLOUR OR GRAIN MILLS.

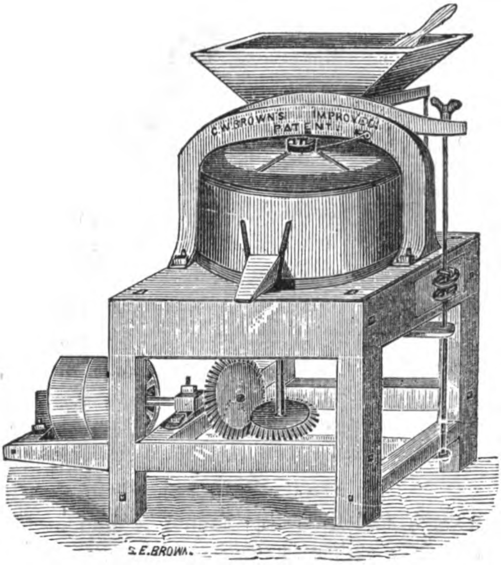


Fig. 131.

Of these we have many sizes, ranging from 12 to 60 inches in diameter, for hand, horse, steam, or water power; particularly adapted for grinding all kinds of grain, also drugs and spices. We have them of three varieties of stone—French, Cologne, and Georgia Burr—intended for either flour, corn-meal, spices, or plaster. These mills are all complete and ready for use, as seen in cut, and can be shipped whole or in boxes, as may be desired. Their capacity is governed, of course, by the size of the mill and the material to be ground; the smallest grinding, by hand, 2 bushels of corn per hour, by power, about 3; the largest, from 12 to 14 bushels of flour, and 20 to 24 bushels of corn-meal, per hour; and the intermediate sizes in proportion. The stones vary in diameter from 2 to 4 inches, and are placed in the frame either horizontally or vertically.

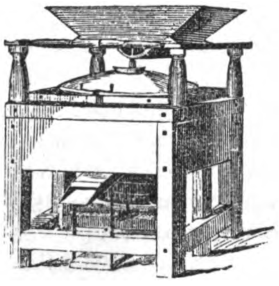


Fig. 132.

Besides the Mills represented in cuts, we have a number of other patents, differing in shape and operation, though very similar in principle.

Persons ordering, will please state the material they want to grind, the amount of power to be employed, and how much work they want done, and we can then send them a mill which will answer the purpose.

HOISTING SCREW AND BALES.

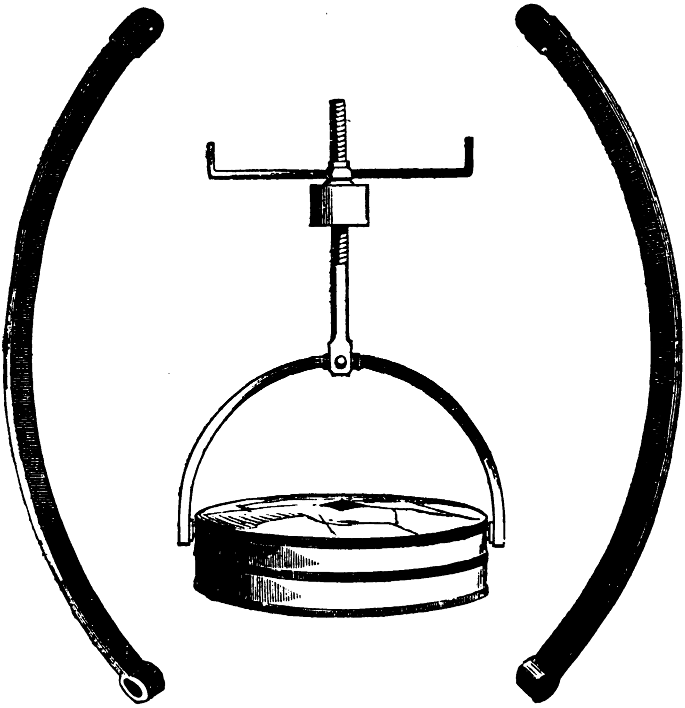


FIG. 133.

In connection with the milling business, the above is almost an indispensible article; the purpose for which it is used being to raise millstones so that they can be turned to dress and sharpen them. The above cut represents the screw and bales connected to the stone, also the bales separate. We furnish these of various sizes and prices, and would recommend their use by every miller; as, with their aid, one man can raise and turn the largest stone ever used in a mill, while without, it would take nearly a dozen, and the risk of breaking or falling would be very great.

CORN AND COB MILL.

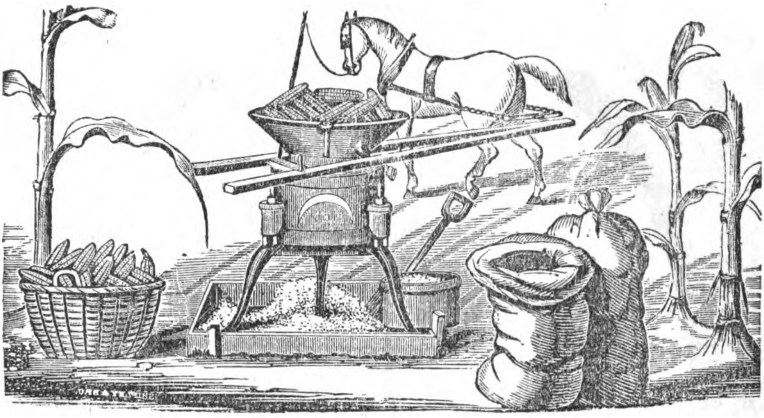


FIG. 134.

The attention of stock feeders is especially solicited to this Mill, believing it to be just the thing so long wanting for the purpose intended.

Some 2,000 Mills have already been sold the past season; and, so far as known, have given universal satisfaction. Many testifying that their Mills had more than paid for themselves the first month, while others aver that its regular use for one week will more than save its cost, in tolls alone.

This Mill has doubtless attained more celebrity for doing its work with extraordinary ease and certainty, than any other article of labor-saving machinery ever presented to the agricultural world; the merit of which consists chiefly in the peculiar arrangement of first breaking, then crushing and crumbling, the cob at the centre of the Mill.

These Mills are guaranteed, in the most positive manner, against breakage or derangement; and warranted to grind feed from ear corn, and grits or fine hominy from shelled corn, with a degree of ease and convenience for farm purposes never attained before.

For portability, simplicity of construction, and convenience of use, they have no equals. They weigh from three to five hundred pounds, according to size; can be put in operation by the farmer in twenty minutes, without expense or mechanical aid, then adjusted and used with convenience by anybody

This Mill is admirably adapted to grinding bark, dry roots, etc.

HAND AND POWER MILL.

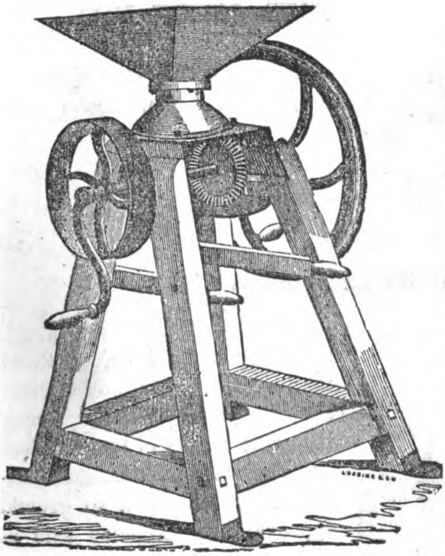


FIG. 135.

The Mill here represented is intended for farm, plantation, and grocers' use, to grind rice, corn, coffee and spices. It can be operated by hand or other power, and will grind about 4 bushels per hour. It is very strong and durable, not likely to get out of order, and is so made that when the plates are dull they can be taken out and sharpened, or replaced by new ones. Every farmer and planter should have one, as the Mill soon pays for itself by the saving over the old plan of taking "grist to the mill."

HAND MILL ON FRAME.

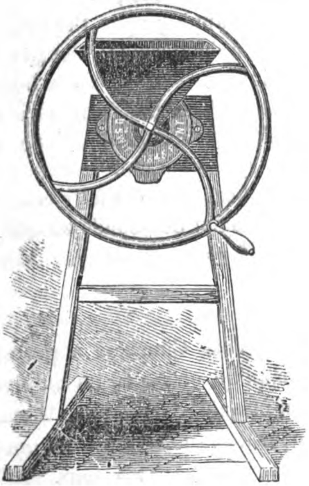


FIG. 136.

These Mills are designed for grocers and family use, to grind coffee, spice, or grain, in small quantities; and, where known, there is no question of their superiority over all others. Their durability, combined with their great speed, easy mode of regulating, simplicity, and uniform fineness or coarseness of the material ground, places them beyond competition.

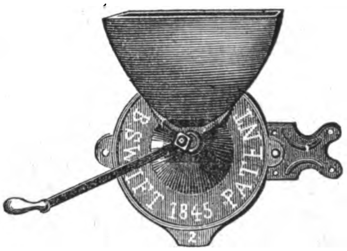


FIG. 137.

HAND COFFEE MILL.

For grinding coffee and spice for family use. Of these we have three sizes.

DOG AND SHEEP POWER.

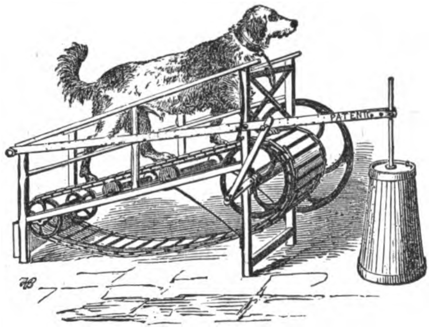


FIG. 138.

Few more valuable implements, in or about the farm, are found than a good, cheap, and efficient churning power; and few, among the great variety of the machines manufactured at this establishment, have met with so general approval and extended sale as the endless Dog and Sheep Power. It is constructed upon two india-rubber straps, by means of slats riveted to them; on the upper side of the slats small buttons are made fast, which lap past the joints of each slat, and each in its turn lapping upon the next, thus forms a self-supporting platform, on which the animal walks; the platform is supported at each end, and at proper intervals along the whole length, with drums or pulleys; the motion of the endless platform giving action to the forward drum, through it to a crank upon one end, and to a balance-wheel on the other, producing the necessary motion and steadiness required to operate the ordinary dash churn. A sheep is found fully equal to a dog; the work is not hard upon either, and a dog of 30 pounds weight, or more, is found sufficient to do all the churning for a large dairy. Machines warranted to work as described, etc.

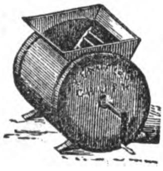


FIG. 139.

CYLINDER CHURN.—This Churn is a great favorite with the farming community, owing to its simplicity, nicety of work, and ease of cleaning. We have them of different sizes, suitable for churning the cream from one or twenty cows. Many thousands have been sold, and given entire satisfaction.

THERMOMETER CHURN.

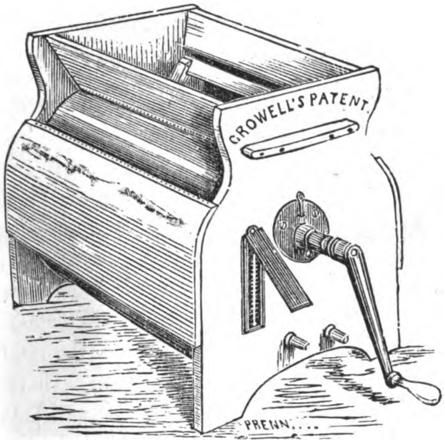

CROWELL'S PATENT.
PRENN...

FIG. 140.

This Churn is now very generally used and extensively known; and wherever introduced, it has been acknowledged to be unsurpassed. Its chief merit and peculiarity consists in the method of keeping the cream or milk at the proper temperature. This is done by having a double bottom; two sheets of zinc, semi-circular in form, being placed one above the other, leaving a space between, into which cold or warm water may be poured, as may be necessary to raise or lower the temperature of the cream; and, in order to ascertain with certainty when this is correctly done, a thermometer is inserted in one end of the Churn, the mercury being inside, so as to be affected by the cream or milk, and the indicator, marked at 62 degrees, distinctly visible from without. In case there is too much heat, the mercury will show the same by rising above the mark of 62, and cold water must be introduced in the chamber above referred to; when the cream or milk is too cold, the mercury will fall below the mark, and warm water should be applied, instead of cold. Care should be taken, when pouring in the water, to turn the crank, by which means the cream is made of an equal temperature throughout; and the water, after raising or lowering the temperature to the point marked on the thermometer, may be drawn off through the tube at the bottom, after which the churning should be done by turning the crank about 40 times per minute. This Churn is easily operated, readily cleansed, simple in make, light, portable, very durable, and the only one with which butter can be made in warm climates.

We have seven sizes, as follows:

No. 0	....2½ Gallons	No. 4	....10½ Gallons.
" 1	....4½ "	" 5	....14½ "
" 2	....6 "	" 6	28
" 3	....9 "		

PATENT SELF-ACTING CHEESE PRESS.

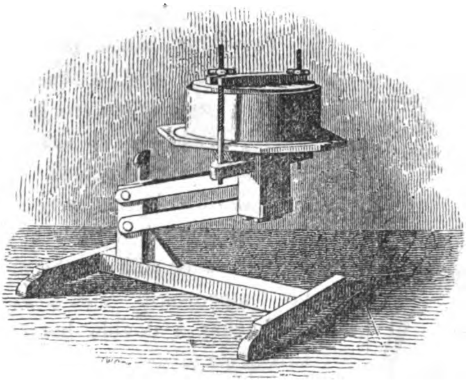


Fig. 141.

This Press is now acknowledged to be the greatest labor-saving machine ever introduced into the dairy. They occupy but little space, are not likely to get out of order, and can be managed by a child. They are capable of holding and pressing a cheese of 125 to 175 lbs.; and the amount of pressure can be increased or diminished at pleasure, in the ratio of 1 to 24. As it is, in reality, a table on which to turn the cheese, there is no need of removing it until the pressing is completed. The cut represents the press in actual use, with a cheese in it. They can be packed in a very small space, and shipped in safety to any part of the world.

COMMON HAND HAY CUTTER

In cutting hay or straw with this, the length of cut is regulated by the person using it, as the hay or straw is moved up to the knife by hand, cutting any length as may be desired. It is very simple, easy to keep in order, low-priced, and large enough to cut feed for one or two animals.

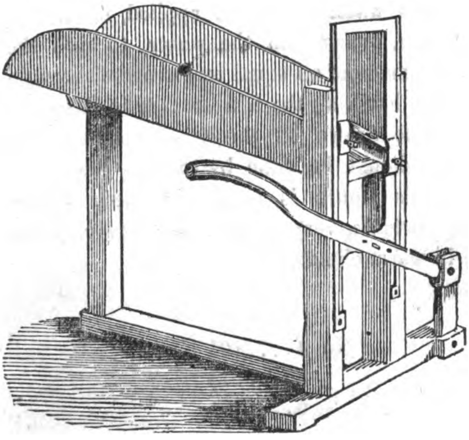


Fig. 142.

Hay Knife.

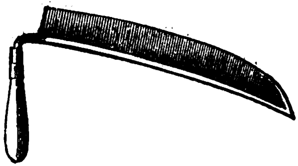


Fig. 143

For cutting hay in the mow.

CYLINDER HAY AND STRAW CUTTER.

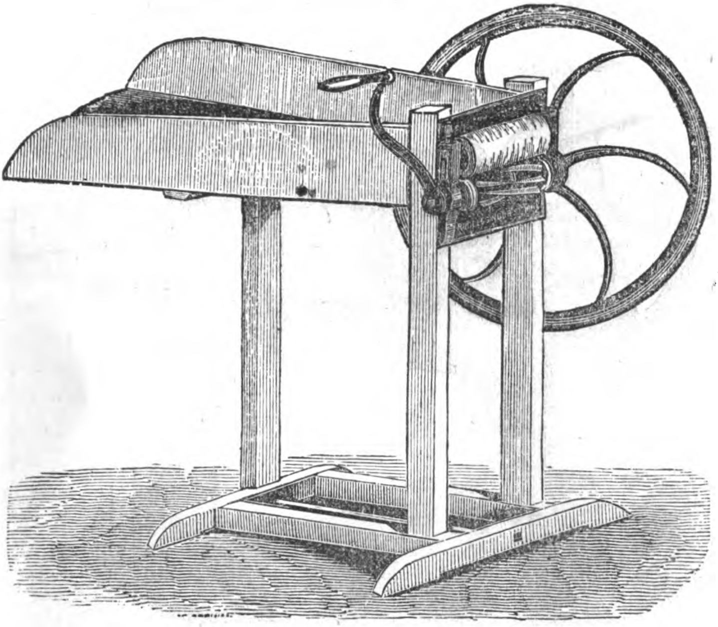


FIG. 144.

This is admitted to be the best and most economical hand machine in use, for cutting hay and straw for horses. The smallest size is capable of cutting feed for six to eight horses, and larger ones in proportion.

We make over twenty sizes.

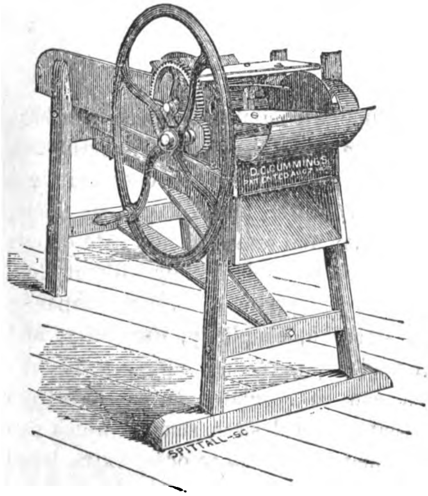


FIG. 145.

CUMMINGS' PATENT

Hay, Straw, and Stalk Cutter.

SELF-SHARPENER.

This machine is a great favorite on account of the facility with which it is worked and kept in order, its never clogging, and its ability to cut any forage, however wet, green, or tangled. Cane tops and Guinea grass are cut by it as easily as any other machine cuts hay. It is very strong; will cut four different lengths of feed, and operates by hand or other power.

DANIELS' PATENT SELF-SHARPENING STALK CUTTER.

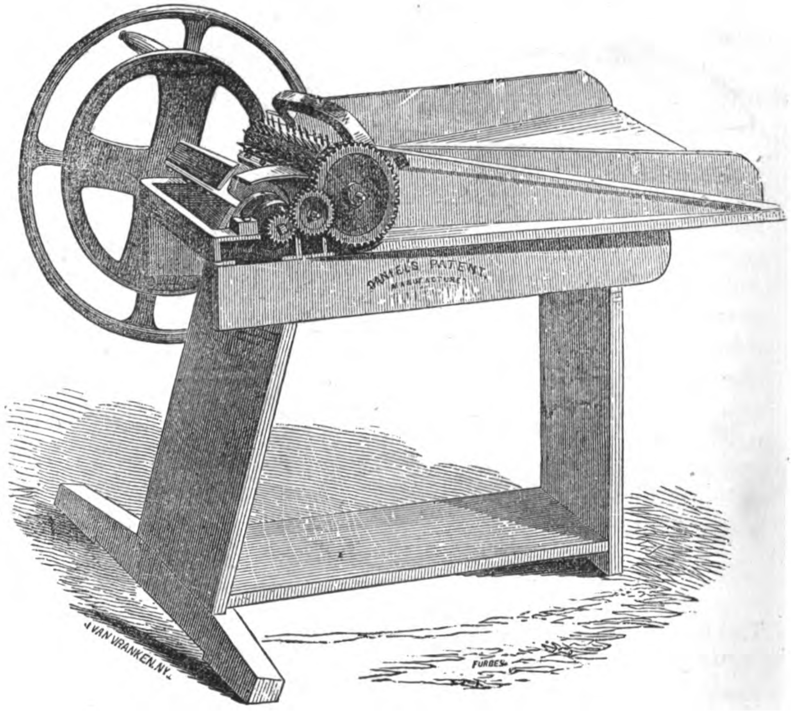


FIG. 146.

This machine has been before the public a number of years, as a hay, straw, and stalk cutter; and, owing to the many merits which it possesses, has gained the name of being the best in use. It can be operated by a One-horse Railway, or any other kind of Power, and will cut up finely, suitable for feed, corn stalks, cane tops, hay and straw, at the rate of one ton per hour. It is a self-sharpener, and feeds itself rapidly without clogging. It is so plainly constructed, that any person of ordinary capacity can keep it in order. For power, strength, simplicity, durability, and general efficiency, there is no Cutter made equal to this.

By the changes of the gearing, it can be regulated to cut feed from ¼ inch to 1½ inches in length. We have several sizes, some of which can be worked by hand as well as power; and we furnish to order extra large ones for cutting brush for bakers' use, paper, etc., for paper mills, and any other purpose where more than usual power is needed.

VEGETABLE CUTTER.

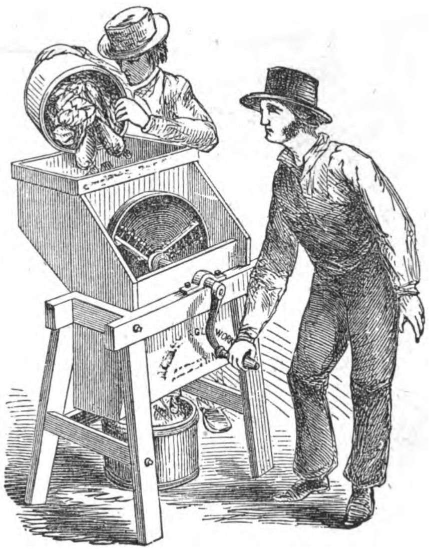


FIG. 147.

Among the many improved labor-saving machines, for the benefit of the farmer and agriculturist, may be found the one represented above, for cutting vegetables, such as beets, turnips, carrots, apples, etc., to feed stock. Many a farmer has lost a good cow or an ox, by their getting an apple, potato, or piece of turnip in their throat and choking them; whereas, if the food had been properly prepared by a Vegetable Cutter, the animal might have been saved. One animal saved in this way would pay for a dozen Machines. The Cutter, as shown above, is capable of cutting up fine, suitable for cattle, one bushel per minute. The vegetables are placed in the hopper on top, and as they come in contact with the cutting-wheel, turned by a man in front, they are instantly cut into small square pieces, fit for feed. We could say much more in favor of this Machine, but a trial is a sufficient guaranty of their capacity and usefulness.

HICKOK'S IMPROVED PORTABLE CIDER MILL.

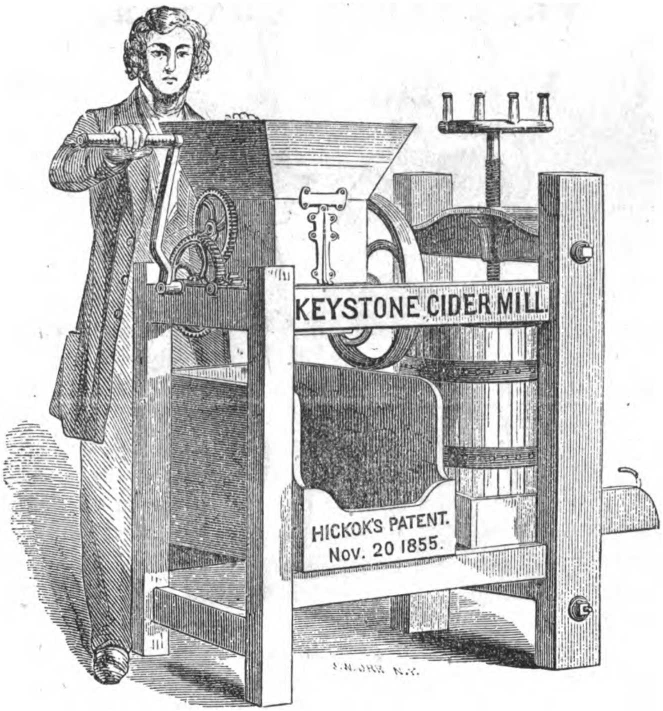

KEYSTONE CIDER MILL
HICKOK'S PATENT.
Nov. 20 1855.

FIG. 148.

This Mill is now acknowledged to be the very best that has ever been offered to the public, as a combined Cider Mill and Press. Its capacity for amount of work has not been equalled. By having it on your plantation or farm, you can, at any time, in a few minutes make a few gallons of sweet cider for present use; or you can very expeditiously make up a few barrels. The machine, well worked, is capable of making 6 to 12 barrels a day, with ease. It is made to run by horse, steam, or hand power; and when the apples are ground, a small boy can press the pomace with all ease. The following may be adduced as the decided advantages of this Mill:

1. It will make more cider than any other Press, with a given quantity of apples in a given time, and at much less labor and expense. 2. It will make cleaner and sweeter cider than any other Mill. 3. You can make the cider as you want it, and when you want it; and in quantities from one gallon to barrels. 4. With it you can press your currants, cherries, berries, cheese, butter, lard and tallow. 5. With its use you can at all times have fresh and sweet cider. This Mill occupies about 2½ feet by 3 feet, is 4 feet high, weighs 370 lbs, and is every way portable and convenient.

PATENT APPLE PARER, CORER AND SLICER

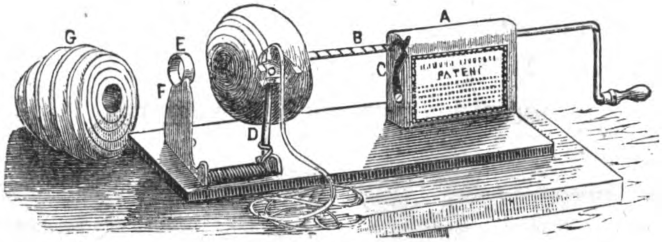


FIG. 149.

Improved Machine for Paring Apples—an excellent article for family use, or those wishing to prepare dried fruit for market. Such has been its popularity, that many hundred thousands have already been manufactured and sold. The introduction of the Parer enables one person, or even a child, to accomplish as much labor as eight or ten persons could do by the old process of paring by hand. It very pleasantly and expeditiously pares, cores and slices the apple, all at one operation. It is easily operated and made to produce the exact result desired. The paring-knife is adjustable by set screws in the knife-head; the slicer is also adjusted to produce the desired work by means of a set screw at the foot; and the corer is regulated to take out a larger or smaller core, by means of the same set screw.

IRON CYLINDER MEAT CUTTER.

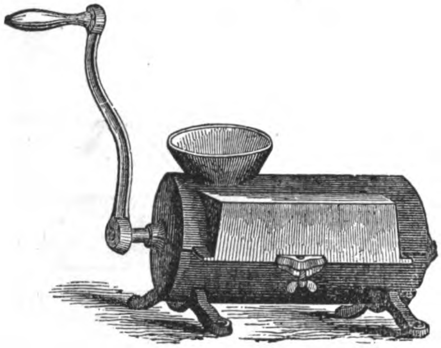


FIG. 150.

We have added to the list of articles made by us, four sizes of Meat Cutters, illustrated by the cut. The cases and cylinders are made of iron, and the knives of steel.

It requires but a moment's reflection to convince any one of the utility of such a machine, and its convenience on account of its size; while the price puts them within the reach of all classes in the community. Most machines for these purposes, hitherto introduced, have been of the larger dimensions, and designed chiefly for markets; while the smaller sizes of these are intended for the use of public houses, families, and the community generally. It may be mentioned, that its use need not be confined to the cutting and preparation of sausage meat, but for hashing purposes generally, whether of meats or vegetables. They are certainly a very nice arrangement for the purposes intended, and their appearance is faithfully delineated in the cut.

WOODEN CYLINDER MEAT CUTTER.

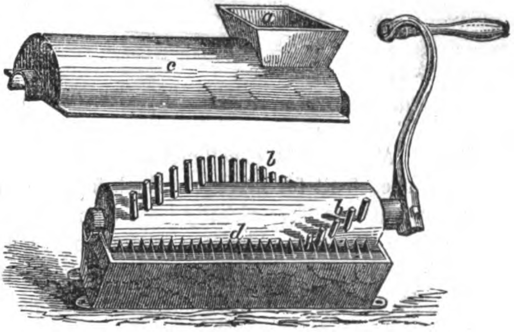


Fig. 151.

This useful machine is nicely arranged in an iron case, having steel knives and a wooden cylinder, as illustrated by the cut. They work well and give general satisfaction, and come cheaper than the iron cylinder.

SAUSAGE STUFFERS.

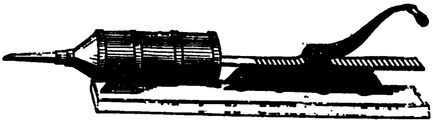


Fig. 152.

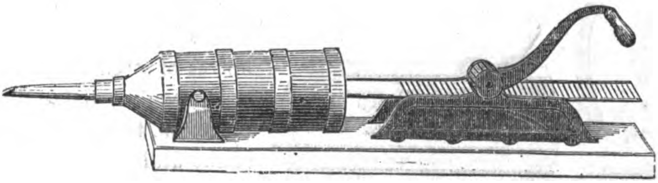


Fig. 153.

The Sausage Stuffer is a necessary accompaniment of the Meat Cutter, and has been provided by us, as will be seen by the above illustrations. Simple and convenient, it secures favor at the first instant of its examination, and the great advantage in the use of these machines over all others is too apparent to need any further commendation.

Of these we make four sizes.

SUGAR MILLS.

These Mills are used by grocers for grinding sugar, to crush the hard portions, and give the whole a light and uniform appearance. It is found necessary, when taking all brown sugars from the original packages, to run them through a Mill of this kind, as it benefits the sugar, and much improves its looks. There are other uses to which these Mills can be put with profit, for they will crush any other light substance as easily as sugar.

We make three sizes of the box Mills, and two of those to be used with barrels. The larger ones can be arranged to be worked by power.

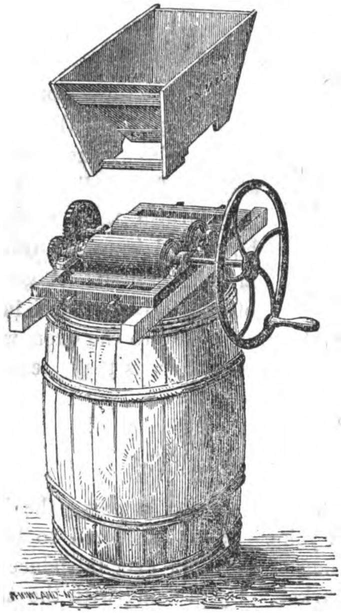


FIG. 154.

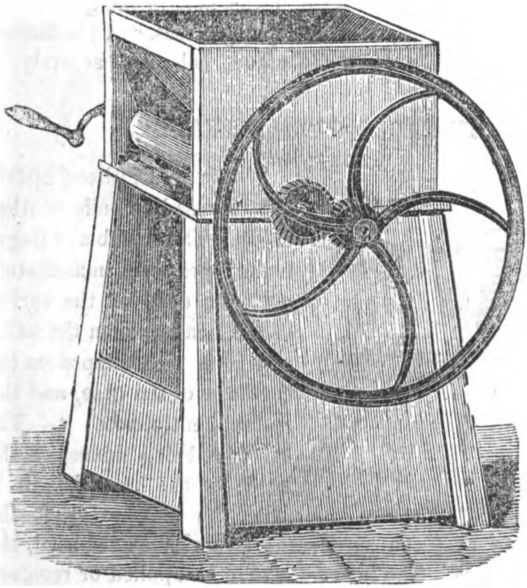


FIG. 155.

OX YOKES.

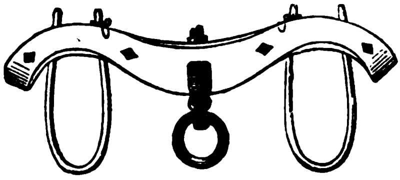


FIG. 156.

We have these from some of the best makers in the country, of many different sizes and patterns, suitable for small or large cattle. We furnish them complete, with bows and irons, or otherwise, as may be desired. A good yoke is of much importance in securing the greatest amount of labor with the utmost ease to the oxen, while those constructed on bad principles are almost worthless, as they greatly increase the labor, and often seriously injure the animals.

PATENT OX BOW PIN.

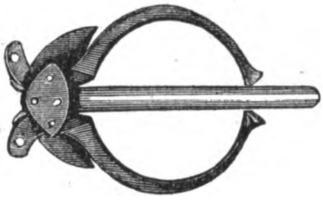


Fig. 157.

This is used for fastening the bow in the ox yoke. It is considered to be the best thing of the kind ever introduced into this market. By pressing with the thumb and finger on the spring at the end, the circular parts open from the centre; the Pin is then slipped through the hole in the end of the bow, when the spring closes, and the fingers clasp round the bow, holding it securely.

HOWE'S ADJUSTABLE CATTLE LEADER.

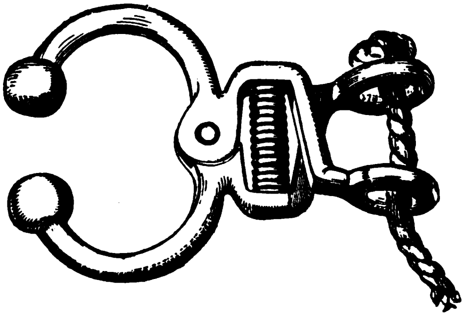


FIG. 158.

This is an excellent instrument for leading bulls or other cattle. The thumb and finger being pressed immediately over the ends of the spring of the Leader, open the balls, and it is then slipped on the cartilage of the nose, and the spring gently closes it. The cartilage being thinner on the inside of the nose than it is near the end, prevents the balls from slipping off, so that the harder the strain is on the cord, the tighter the balls hug the nose. The instrument can be applied or removed in a moment.

CATTLE TIES.

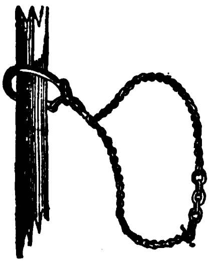


FIG. 159.

This is used for confining cattle in their stalls. It is the most secure fastening known, as well as very convenient and comfortable. The large ring being attached to a round post in the manger, small enough to allow it to slip up and down as the animals move their heads in feeding, the chain is placed round the animal's neck, and the T end is put through one of the small rings at the other end of the chain. In this way the animal, although entirely secure, is at liberty to move in any direction. One of these fastenings will last for many years, and is suitable for all sizes of cattle.

BULL RING.

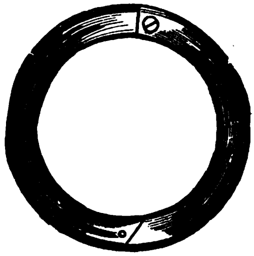


FIG. 160.

An indispensable article in the nose of every bull of the age of one year and upwards. With it the most vicious can be entirely controlled—without it no bull is safe to handle. The cartilage between the nostrils is punched or bored with an awl, or with a red hot iron of the thickness of the ring, which is then inserted and screwed firmly together. We have them of different metals, and plated with silver. We also furnish a staff, on the end of which is a stout spring hook, which is inserted in the ring in the nose of the animal, by which he is then led with entire safety, kept off the length of the staff.

ROOT AND BUSH PULLER.

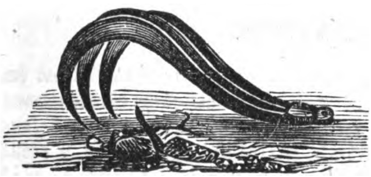


FIG. 161.

We make these of various sizes, of iron, with 2, 3, 4, and five prongs. They are made very strong, and will stand the draft of two or three yoke of oxen. In clearing up new land, they are a very useful implement, for extracting clumps of bushes, roots, etc. One man, with a good pair of oxen or horses, will with this do the work of ten men.

IRON OX SHOVEL. OR DIRT SCRAPER.

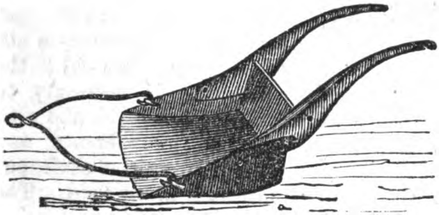


FIG. 162.

We manufacture three different sizes of this article, for use with one to four horses or oxen. This is found to be a very excellent labor-saving machine for removing dirt, levelling hills, making or repairing roads, digging ditches and cellars, and a useful implement generally on farms and plantations.

BUSH OR BRAMBLE HOOK.

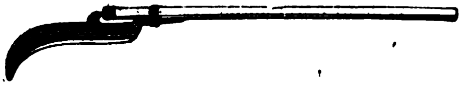


FIG. 163.

For cutting down bushes, briars, etc.; very useful on the farm for clearing up around the fences. We have different sizes, with and without handles.

FOLDING LADDER.

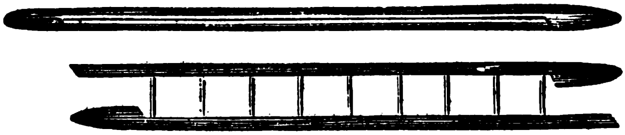


FIG. 164.

Fig. 164 represents a Folding Ladder, showing it both open and shut. This is very convenient for many purposes, but especially for gathering fruit, as it can be closed and carried from place to place with much ease. They are quite strong, though light. We furnish them of any desired length.

GRINDSTONE HANGINGS.

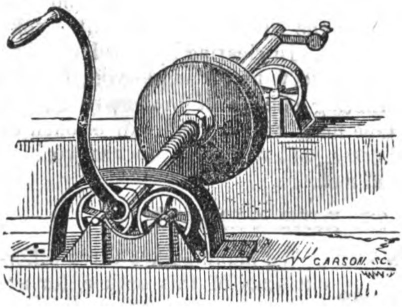


FIG. 165.

This cut represents our latest improvement in hanging Grindstones. It consists of a strong round iron shaft, with bearings turned, a small foot crank at one end, and a crank handle at the other. Near one of the bearings is a wide flange, made solid with the shaft; another plate, corresponding to the first in size and form, with a hole through its centre, is slipped on the handle end of the shaft, and followed by a nut which works in the screw cut in the shaft. All that is necessary to hang the stone, is to fill the hole of the stone with some soft wood, and with dividers find the true centre, by measuring from the circumference, and bore a round hole just the size of the shaft; then insert the shaft, put on the loose plate, and follow up with the nut until it is firmly held. The crank may then be put on, and the whole suspended on the anti-friction rollers, fit for use—forming at once the best Hangings ever invented.

GRINDSTONE MOUNTED.

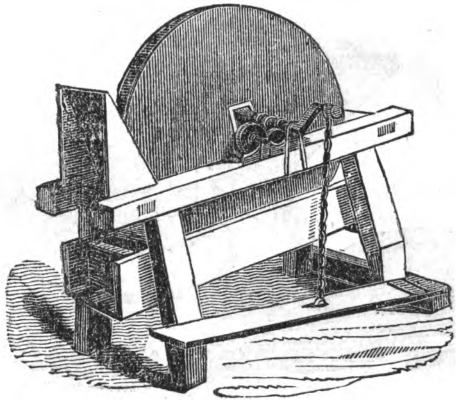


Fig. 166.

Fig. 166 represents a Grindstone fully rigged, and hung on friction rollers, turned by a crank on one side, and by a treadle on the other. By this arrangement, the stone can be turned and the work done by one person. Our assortment contains the greatest variety of sizes and thicknesses of Berea Stones and grindstone frames; also stones and fixtures hung in order, for use by hand, foot, or power.

AUGER FOR BORING POST HOLES.

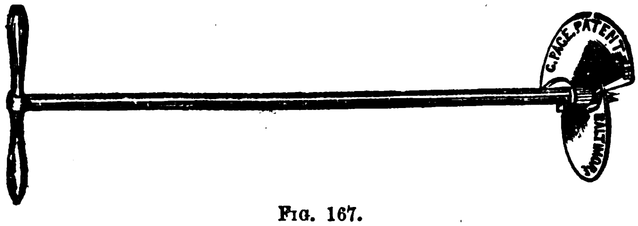


Fig. 167.

This labor-saving machine will do three times as much work as can be performed in the old way with the spade. It bores the hole nicely and smoothly, and just the size wanted.

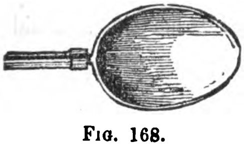


Fig. 168.

Post Spoon—or Scoop, for digging or scooping out the dirt from the bottom of deep holes—a very useful article in setting telegraph posts. They are made of iron or steel.

YANKEE RAT TRAP.

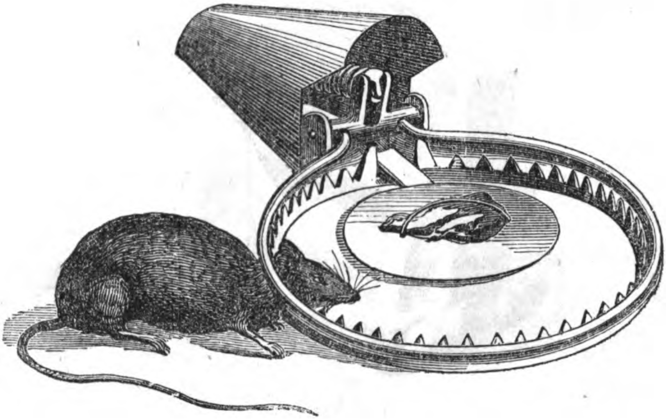


FIG. 169.

Simple, but sure; easily set, and without danger. We have several styles and sizes of Traps, for mice, rats and game, two of which are shown below.

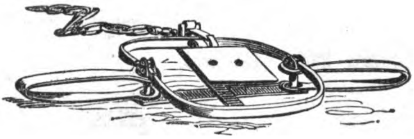
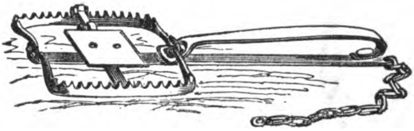
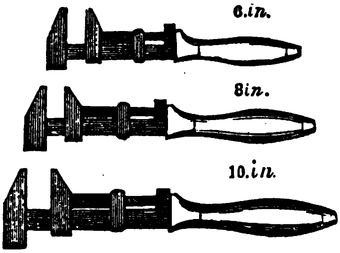


FIG. 170.

RAT AND GAME TRAPS.

FIG. 171.





6.in.
8in.
10.in.

FIG. 172.

PATENT SCREW WRENCHES.

Of this useful article we have many sizes. No farmer or machinist should be without one.

OPEN BACK CURRY COMB.

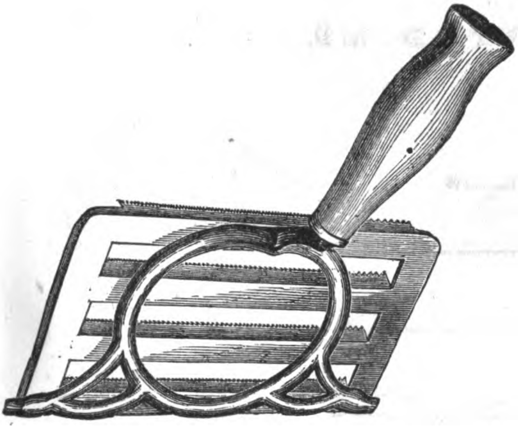


Fig. 173.

CLOSE BACK CURRY COMB.

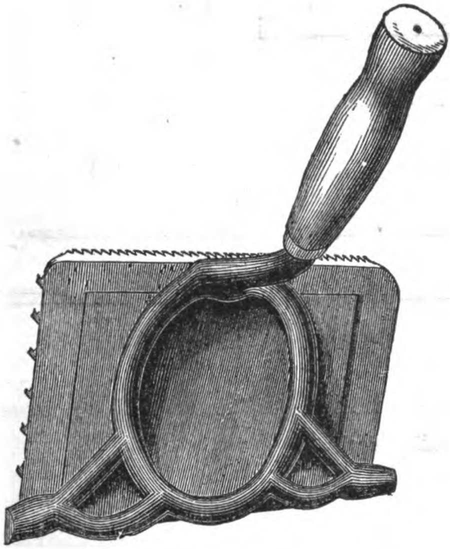


Fig. 174.

IRON HORSE POST.

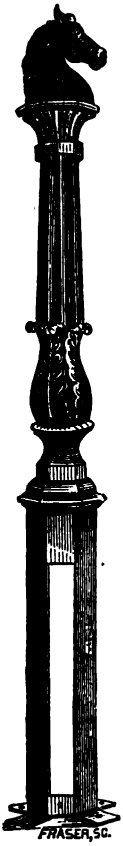


Fig. 175.

ASSORTED HANDLES.

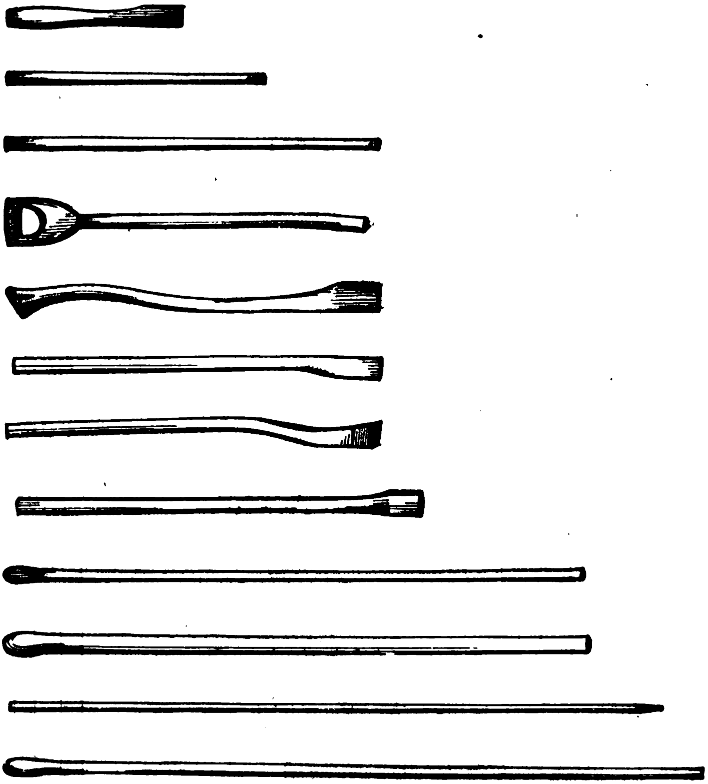


FIG. 176.

These Handles we sell separate from the implements, and are prepared to furnish them in large or small quantities.

AXES AND HATCHETS.

Among our assortment of Axes and Hatchets, may be found those of warranted quality, from the best manufacturers in the country—Simmons, Collins, Hunt, Lewis, and others—furnished with or without handles.

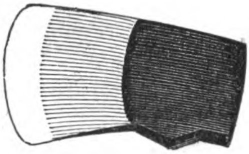


Fig. 177.

Kentucky.

Light, 3½ to 5 lbs.
Medium, 4¼ to 5½ lbs.
Heavy, 4¾ to 6 lbs.

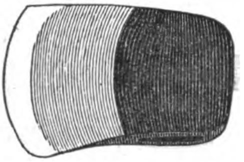


Fig. 178.

Michigan or Wide Bit.

Assorted, Light, 3 to 4 lbs.
Medium, 3¾ to 4¾ lbs.
Heavy, 4 to 5½ lbs.

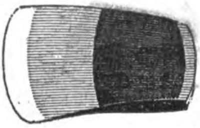


Fig. 179.

Yankee.

Assorted, 3½ to 4½, 3¾ to 4¾ lbs.
Assorted, 4 to 5 or 5½ lbs.

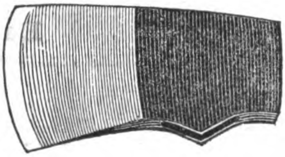


Fig. 180.

Georgia Long Bit.

Medium, 4 to 5½ lbs.
Heavy, 4¾ to 6¼ lbs.

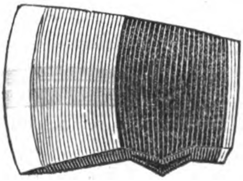


Fig. 181.

New Jersey.

Assorted.

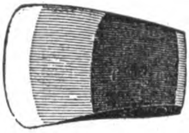


Fig. 182.

H. Ohio Heavy Head.

Medium, 3½ to 4¾ lbs.
Heavy, 4 to 5 or 5½ lbs.

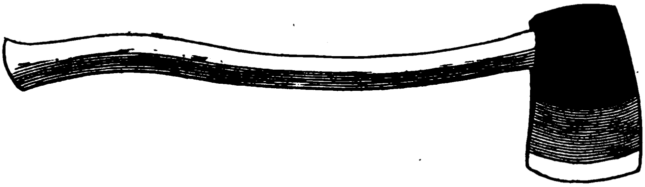


FIG. 183.

Handled Axe.

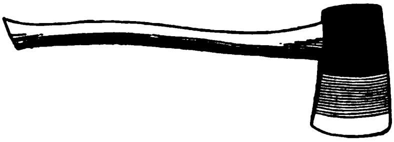


FIG. 184.

Half or Boy's Axe.

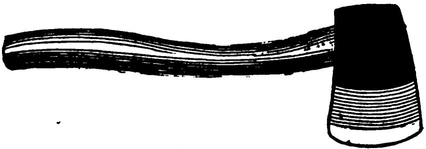


FIG. 185.

Hunter's or Axe Hatchets.

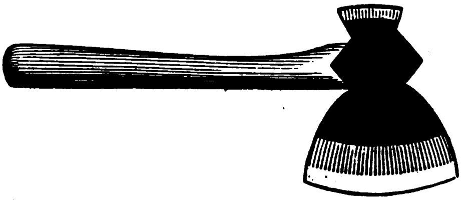


FIG. 186.

Bench Axes.

No. 4, 5 inch cut.	No. 7, 6¾ inch cut.
No. 5, 5½ "	No. 8, 7½ "
No. 6, 6 "	No. 9, 8¼ "

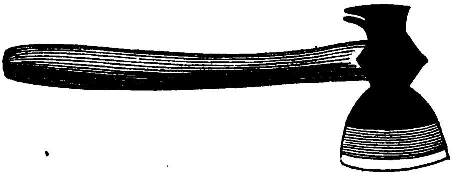


FIG. 187.

Claw Hatchets.

3¾ inch cut.

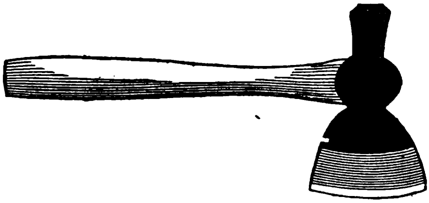


FIG. 188.

Shingling Hatchets.

No. 0, 3¼ inch cut.
No. 1, 3½ “
No. 2, 3¾ inch cut.
No. 3, 4 “

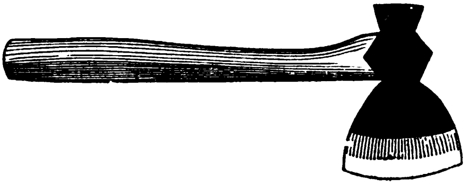


FIG. 189.

Pruning Hatchets

No. 1, 3½ inch cut. No. 2, 4 inch cut. No. 3, 4½ inch cut.

FIG. 190.

Cast Steel Adze Eye Hammers.

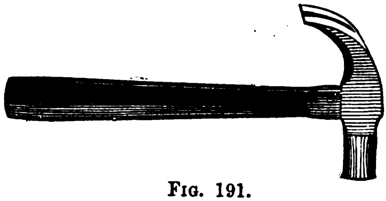


FIG. 191.

Steel Face and Clamp Hammers.

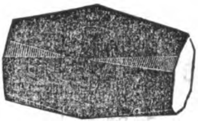


FIG. 192.

Stone Mauls.

Cast Steel Faced, assorted, 10 t
25 lbs.
Made of all Cast Steel, assorted,
7 to 20 lbs.

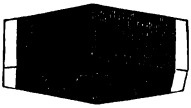


FIG. 194.

Stone Hammers.

Assorted, 3½ to 10 lbs.
" 10 lbs. and upwards.

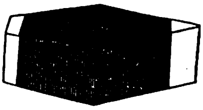


FIG. 193.

Stone Hammers.

Assorted, 3½ to 11 lbs.
" 10 lbs. and upwards.

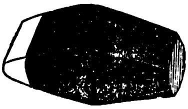


FIG. 195.

Blacksmith Sledges.

Assorted, from 6 to 20 lbs., Cast
Steel face and pene.

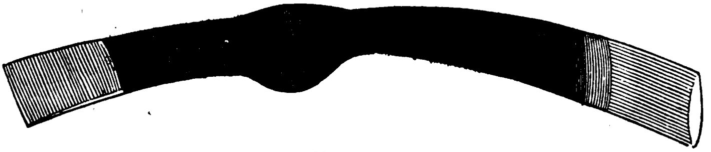


FIG. 196.

LARGE MATTOCK.

Cast Steel ends, assorted, 6 to 7 lbs., 3½ to 4¼ inch cut, packed in one and two dozen cases.

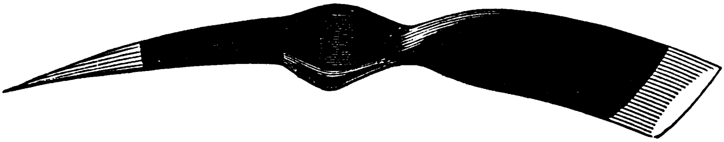


FIG. 197.

PICK MATTOCK.

Cast steel ends. A very useful tool, being a Grub Hoe and Pick combined. 5 inch cut, assorted weights, 5 to 6 lbs., packed in one and two dozen cases.

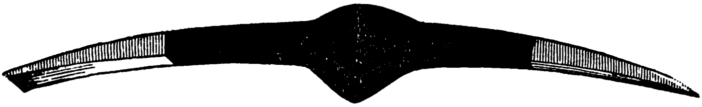


FIG. 198.

RAILROAD PICK.

Assorted, 4¼ to 6½ lbs. Assorted, 5 to 7½ lbs.

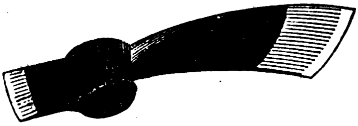


FIG. 199.

GRUB HOE, WITH CUTTER.

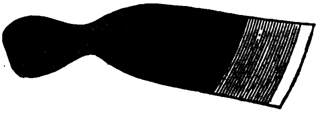


FIG. 200.

OVAL EYE GRUB HOE.

Three sizes.

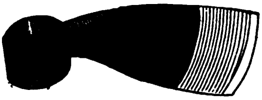


FIG. 201.

ROUND EYE GRUB HOE.

Three sizes.

Figs. 199, 200, 201 represent three different kinds of Grub Hoes, which we furnish with or without handles. They are generally used for clearing up new land, and in meadows or swamps for cutting bogs. They are an excellent, well-made article, and much liked.

COUNTER SCALES.

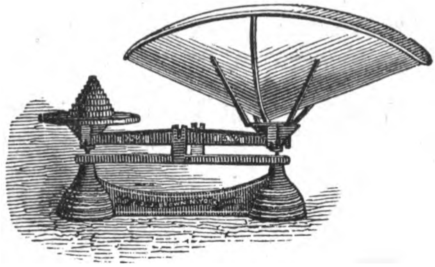


FIG. 202.

These are for shop or house use, and an excellent article for weighing small quantities. They are simple, durable, and any part can be easily duplicated, should wear or rough usage render it necessary. Many sizes and styles of these are made, capable of weighing from half an ounce to sixty pounds.

PORTABLE PLATFORM SCALES.

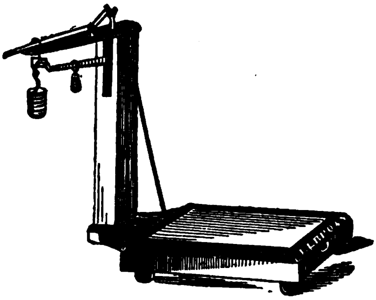


FIG. 203.

For store use. These are made of different capacities, from 400 to 2,500 lbs., and are very accurate. They are furnished with or without drop-levers, as may be desired; and being on wheels, are of great general convenience on account of their portability.

DORMANT PLATFORM SCALES.

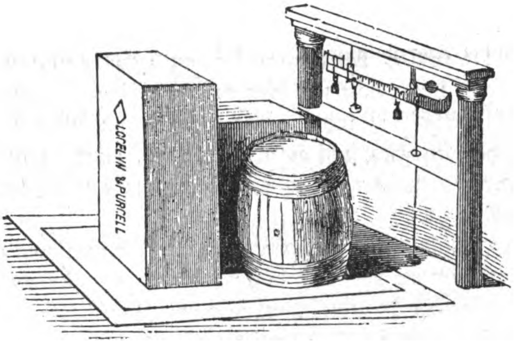


Fig. 204.

For use in railroad dépôts, large manufactories, stores, etc. We furnish them of five sizes, to weigh from 1,400 to 5,000 lbs, and as low as ½ lb. They are set in the floor, and are extremely convenient, as the space they occupy can be used for other purposes when not weighing.

WEIGHING BEAM,

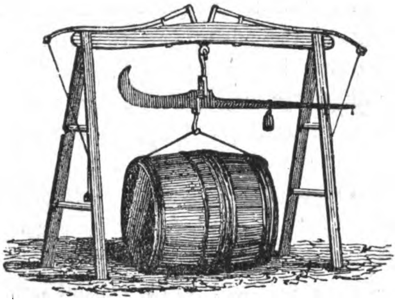


Fig. 205.

With patent balances, hogshead and barrel hooks, coffee and hide bottoms, iron cradles, etc. Cotton, flour and grain Beams of iron or brass, manufactured to order. These Beams, as well as the Platform Scales, are adjusted to any foreign standard, and packed ready for shipment.

PUMPS, WATER RAMS, GARDEN ENGINES, Etc.

The Iron and Brass Cylinder Cistern Pumps, which appear in the Catalogue, together with many new varieties of Force Pumps, render our list, under this head, larger and more varied than is furnished by any other dealers in the United States, and it appears to us hardly possible for any case to arise where the wants of the applicant may not be fully met and supplied from our stock.

We would also allude to the importance of the Force Pump in reference to the interests of farmers, not only as a pump of general convenience, but for the great security it will afford them in case of fire. Separated as they are very often, at considerable distances from each other, they cannot call their neighbors to their aid until so much time has passed, and the fire has become so extended, that even this can avail them nothing, and they are ordinarily compelled to stand by and witness the destruction of their property.

Now, if every farmer had one or more of these Pumps, according to circumstances, with hose of sufficient length, he could in a very few minutes attach it to the Pump, and pour upon the flames a continuous stream of water, with an almost unexceptionable certainty of extinguishing the fire and saving his property.

We wonder that this thing has been so long overlooked and neglected; and can only account for it on the supposition that the majority have been without the knowledge of the advantages it would secure to them. The necessity for insurance would be comparatively nothing, and their expense for insurance, under its protection, would be very much diminished.

Of course, the same reasoning will apply to the inhabitants of small towns and villages, who are without the advantages of a Fire Department; and even where this Department is organized, strong reasons exist for its adoption, on the ground that it is always on the premises and ready to be applied.

For watering gardens, cleaning windows and carriages, and various other purposes; and for vessels of every description, whether steamers or sailing vessels, it will be found convenient for washing decks, wetting sails, etc., and as a protection against fire, which is so greatly called for, by the sad and calamitous experience of the last few years not only, but since the late action of Congress, is now made the duty of every owner of a vessel to furnish and supply himself with.

REVOLVING SPOUT CISTERN PUMPS.

No. 2.

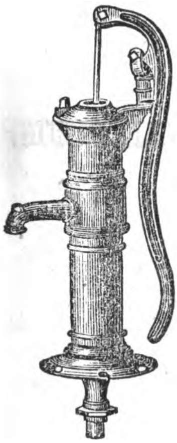


FIG. 206.

No. 3.

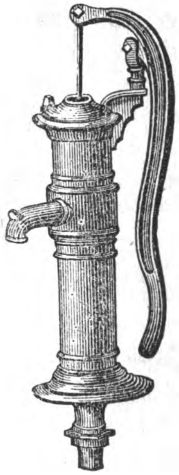


FIG. 207.

No. 4.

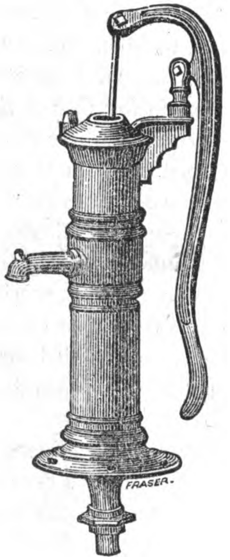


FIG. 208.

Among the many improved and useful articles to be found in our stock, are Iron Cistern Pumps, of all sizes, and suited for every place where a small Pump is needed. They are so made that they can easily be taken apart and access gained to all the valves, without taking up the pipes, or even detaching the platform to which the Pump is fastened.

It will be seen, from their simple and convenient construction, that the whole Pump may be taken apart, examined and repaired if needed, and replaced ready for operation in a few minutes, and that without the use of tools. The spout may be made to revolve, simply by loosening the upper part of the stock, which will enable the spout to be placed in any desired position, which is a great convenience when the Pump is to be put in the corner of a room, and renders the same Pump applicable for various locations. To avoid freezing, the water may be let out of the Pump by raising the brake to its extreme height. These Pumps will draw water as well horizontally as perpendicularly.

YARD, OR WELL PUMP.

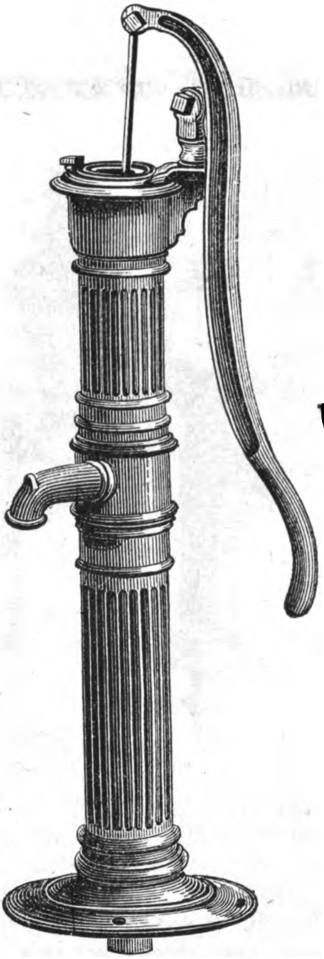


Fig. 209.

This is a much larger Pump than No. 4, on preceding page. It is particularly designed for out-door purposes, and may be used in any well not over 33 feet in depth. It stands about 4 feet high, and is a very handsome ornament in any yard, or in front of houses. The brake or handle can be turned around to any point, to suit convenience. We furnish them of 3 regular sizes, suitable for 1¼, 1¾, and 2½ inch pipes, arranged with brass tubes and coupling, for connecting pipes of lead or other metals; they are very strong, durable, and simple, and not likely to get out of order in years of use. We recommend them as the best in the market.

FORCE PUMPS.

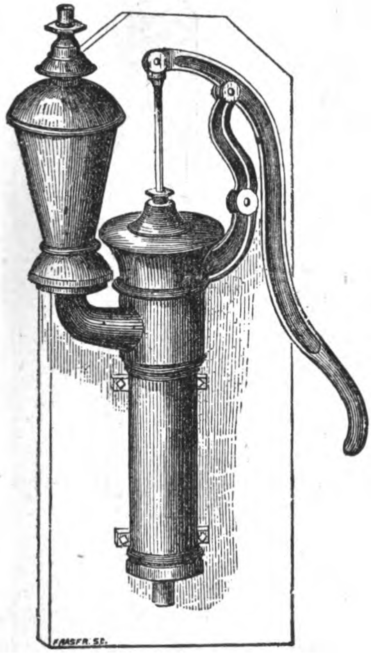


FIG. 210.

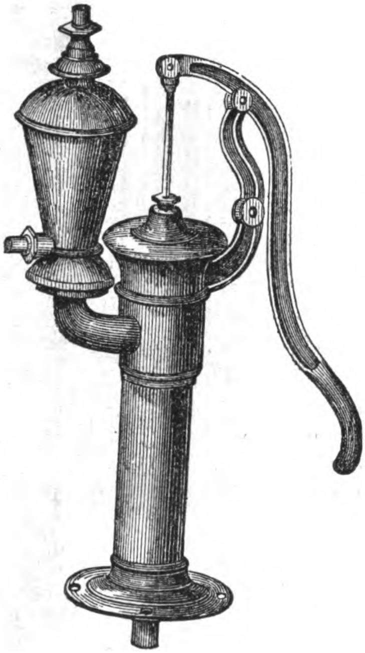


FIG. 211.

Above, we exhibit two styles of Suction and Force Pumps, with air chambers, and double and single discharge. One is made to screw to a plank, so as to be readily fastened to the side of a building; while the other is made to fasten down to a flat surface. They are both designed for house use, for forcing water to the upper stories, although they can be used for other purposes. By inserting a faucet into the pipe, near the top of the air chamber, the water can be prevented from going up, thus leaving it to be used on the first or second floors, as may be desired. They are very efficient, compact, and durable; much in use, and generally liked.

We have them of various sizes.

PATENT SUCTION AND FORCE PUMPS.

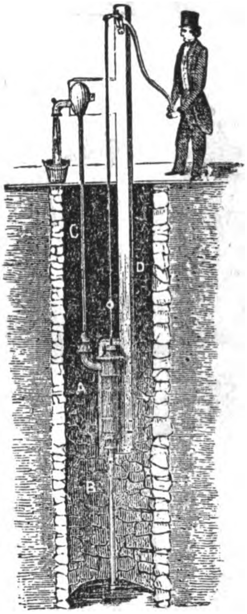


FIG. 212.

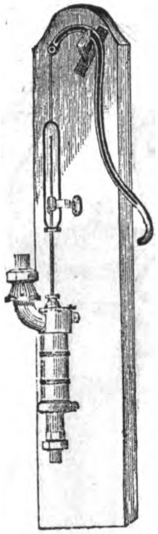


FIG. 213.

Fig. 212 is a diagram of one of our Patent Suction and Force Pumps, applied to a deep well. The Pump is secured to a plank or timber (as shown by D), down in the well at A, within suction distance, or say not over 25 feet from the water, with pipes of lead, or other metal, connected on below and above the same (as shown by B and C). In this manner they may be applied to wells of any depth, or they may be set up in this way in shallow wells, so as to be entirely out of the way of frost, or any trouble from freezing up; making a small hole or leak in the discharge-pipe C, just above the Pump in the well, so that the water will always run back to below a freezing point, when through pumping.

Fig. 213 is a cut of one of our Patent Suction and Force Pumps (same as Fig. 212), constructed with a guide rod, and mounted on a plank, suitable for sucking water from a well or cistern, and forcing it up into bathing chambers, factories, railroad tanks, or any other elevated position required; and may be used for protecting buildings in extinguishing fires, or for pumping out ships, steamboats, mines, quarries, etc.

DOUBLE ACTING SUCTION AND FORCE PUMP.

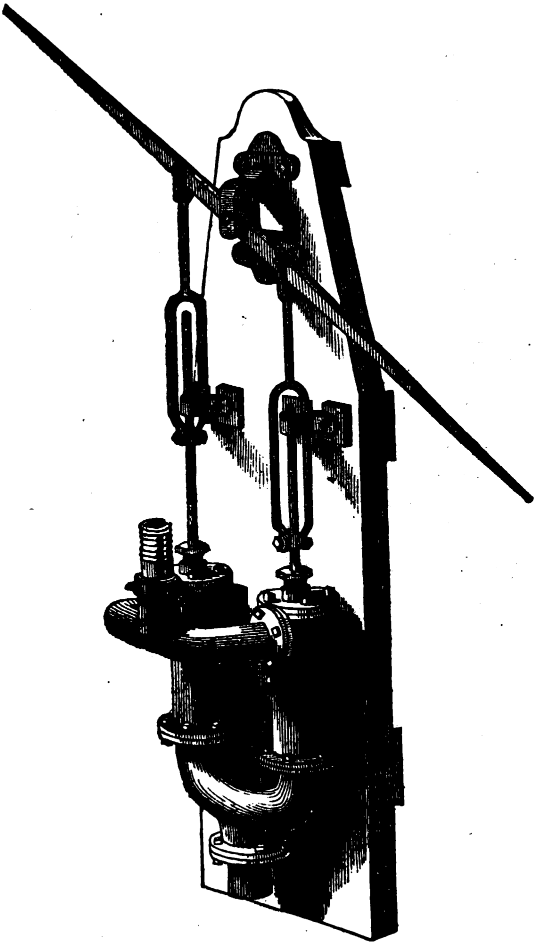


FIG. 214.

These are constructed with two cylinders, and arranged for being worked by hand, horse, wind, water, or steam power; and are particularly adapted for railroad water stations, steamboats, quarries and factories. They are made of six sizes, to fit pipes from 1¼ to 3½ inch bore, and larger ones are furnished to order, if desired. The various uses to which such a Pump can be put will suggest themselves.

CHAIN PUMP.

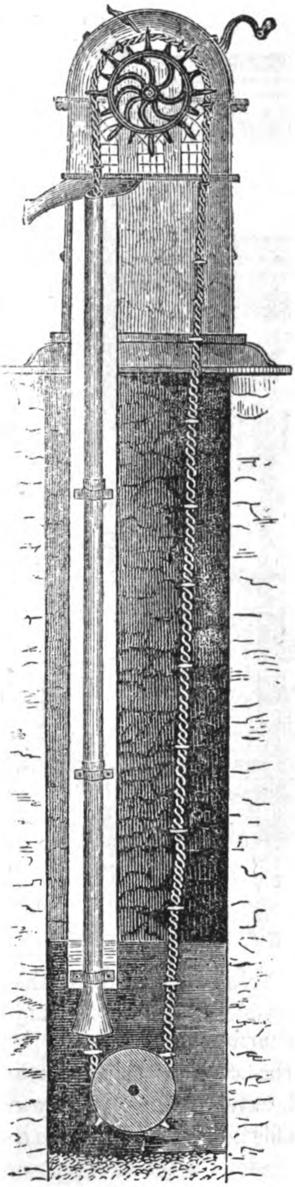


FIG. 15.

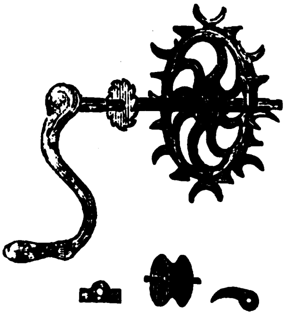


FIG. 216.

Annexed are two engravings showing the method of rigging and operating a Chain Pump, and a set of fixtures. The Chain Pump has lately been very extensively used, and has, to a great extent, superseded all others. It is so simple in its arrangement as almost entirely to obviate the possibility of getting out of order, is so constructed as to prevent freezing, and is the only Pump which can be used with safety in very cold regions. It seldom chokes, and is very valuable for pumping liquid manure; and, on sugar estates, for pumping hot liquids or syrups of any kind.

We make three sizes, 1½, 2, and 3 inch bore. The last two are well adapted for all purposes requiring a large quantity of water, such as the irrigation of land, etc. The tube can be made of iron, zinc, copper, or wood, as may be desired.

IRON CURBS FOR CHAIN PUMPS.

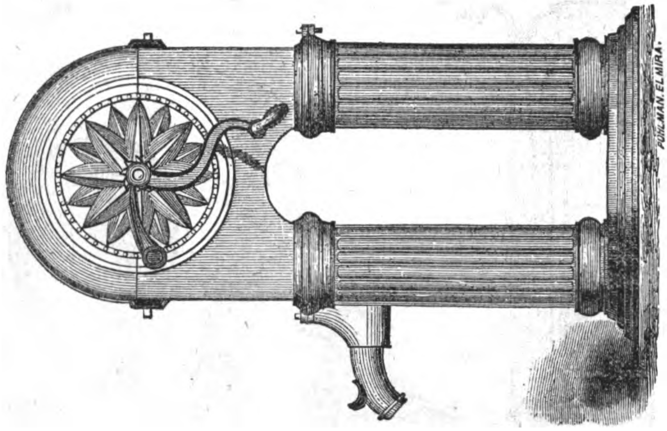

PUHLMAN.ELMIRA.

Fig. 218.

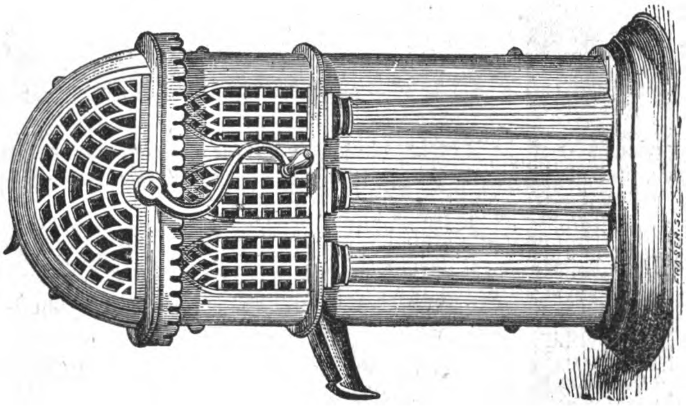


Fig. 217.

The above cuts represent two styles of Iron Curbs, made by us for the Chain Pump. They are a most admirable and complete device, combining ornament with utility, and are without a rival in the market.

Having been before the community for more than four years, they have become generally known; and from actual test, have continued to grow more and more in favor and demand, and need only to be seen to secure a ready approval.

IMPROVED, PREMIUM MEDAL

HYDRAULIC RAM.

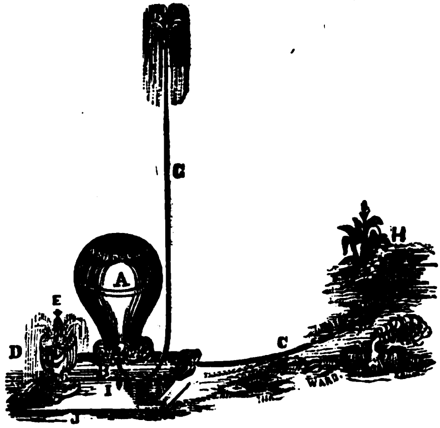


Fig. 219.

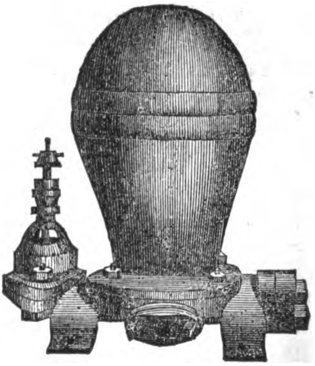


Fig. 220.

Explanation of Fig. 219: H Spring or Brook—C Drive or Supply Pipe from Brook to Ram—G Discharge Pipe, conveying water to house or other point required for use—B D A E I the Ram—J the plank or other foundation to which the machine is secured.

The various uses of the Ram are obvious, viz.: for the purposes of irrigating lands, and supplying dwellings, barnyards, gardens, factories, villages, engines, railroad stations, etc., with running water.

The simplicity of the operation of this machine, together with its effectiveness, and very apparent durability, renders it decidedly the most important and valuable apparatus yet developed in hydraulics, for forcing a portion of a running stream of water to any elevation, proportionate to the fall obtained. It is perfectly applicable where no more than 18 inches fall can be had; yet the greater the fall applied, the more powerful the operation of the machine, and the higher the water may be conveyed. The relative proportions between the water raised, and wasted, is dependent entirely upon the relative height of the spring or source of supply above the ram, and the elevation to which it is required to be raised; the quantity raised varying in proportion to the height to which it is conveyed, with a given fall; also, the distance which the water has to be conveyed, and consequent length of pipe, has some bearing on the quantity of water raised and discharged by the ram, as the longer the pipe through which the water has to be forced by the machine, the greater the friction to be overcome, and the more the power consumed in the operation; yet it is common to apply the Ram for conveying the water distances of 100 and 200 rods, and up elevations of 100 and 200 feet. Ten feet fall from the spring or brook to the Ram, is abundantly sufficient for forcing up the water to any elevation under 150 feet above the level of the point where the Ram is located; and the same 10 feet fall will raise the water to a much higher point than above last named, although in a diminished quantity in proportion as the height is increased.

When a sufficient quantity of water is raised with a given fall, it is not advisable to increase said fall, as in so doing the force with which the Ram works is increased, and the amount of labor which it has to perform greatly augmented, the wear and tear of the machine proportionably increased, and the durability of the same lessened; so that economy in the expense of keeping the Ram in repair would dictate that no greater fall should be applied for propelling the Ram, than is sufficient to raise a requisite supply of water to the place of use. In calculating what fall of water should be applied to the Ram to raise a sufficient supply of water, in conveying it 50 or 60 rods, about one-seventh part of the water can be raised and discharged at an elevation above the Ram, five times as high as the fall applied to the Ram; or one-fourteenth part can be raised and discharged, say ten times as high as the fall applied; and so in that proportion as the fall or rise is varied. Thus, if the Ram be placed under a head or fall of 5 feet, of every 7 gallons drawn from the spring, 1 may be raised 25 feet, or ½ a gallon 50 feet. Or with 10 feet fall applied to the machine, of every 14 gallons drawn from the spring, 1 gallon may be raised to the height of 100 feet above the machine; and so in like proportion, as the fall or rise is increased or diminished.

It is presumed that the above illustrations of what the machine will do, under certain heads and rise, will suffice, for all practical purposes, to enable purchasers of the article to determine with a sufficient degree of nicety as to the head or fall to apply to the Ram for a given rise and distance they may wish to overcome.

THE FOLLOWING TABLE GIVES THE CAPACITY OF THE SEVERAL SIZES OF OUR RAMS, AND THE DIMENSIONS OF THE PIPES TO BE USED IN CONNECTION WITH THE SAME.

Size of Ram.	Quantity of Water furnished per minute, by the Spring or Brook to which the Ram is adapted.	Length of Pipes.		Calibre of Pipes.		Weight of Pipes (if of Lead).		
		Drive.	Discharge.	Drive.	Discharge.	Drive Pipe for any head or fall not exceeding 10 feet.	Discharge Pipe for not over 50 feet rise.	Discharge Pipe for over 50 and not exceeding 100 feet in height.
No. 2	3 qts to 2 galls.	25 to 50 feet.	To where desired.	¾ in.	⅜ in.	6 lbs. per yard.	8 lbs. per rod.	14 lbs. per rod.
No. 3	1½ " to 4 "			1 "	½ "	8 lbs. "	11 lbs. "	16 lbs. "
No. 4	3 " to 7 "			1¼ "	½ "	10 lbs. "	11 lbs. "	16 lbs. "
No. 5	7 " to 14 "			2 "	¾ "	23 lbs. "	20 lbs. "	28 lbs. "
No. 6	12 " to 25 "			2½ "	1 "	40 lbs. "	6 lbs. per yard.	8 lbs. per yard.
No. 10	25 " to 75 "			4 "	2 "	22 lbs. per ft. (of cast iron.)	20 lbs. "	23 lbs. "

GARDEN, OR FIRE ENGINE.

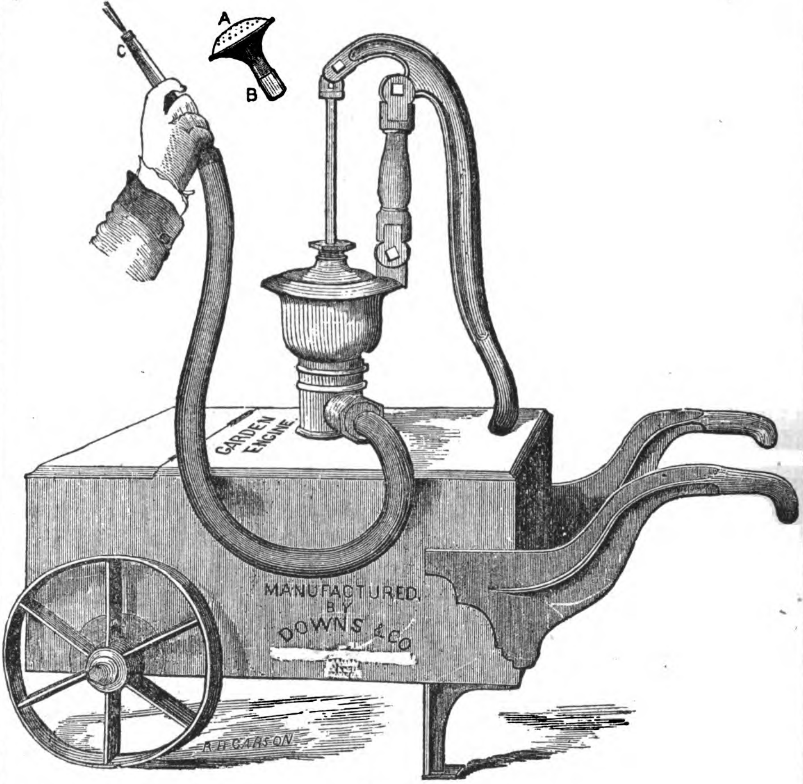


Fig. 221.

Above may be seen a cut of our improved Garden and Fire Engine—a very valuable and useful Machine in case of fire, for washing windows, or supplying nurseries and gardens with regular showers in dry times. By mixing sulphur or oil soap with the water, and sprinkling the same on plants or trees, it will effectually destroy all kinds of worms and bugs. The Engine is mounted on wheels, and can be easily moved from place to place. It has a very strong double action pump, capable of forcing a good sized stream of water 60 feet, and has also a rose jet, for sprinkling flowers, etc. The box will hold about 60 gallons of water. We furnish them of larger and smaller capacity, as may be desired. Pipes, couplings, and hose supplied in any quantity.

HOLLY'S PATENT ELLIPTICAL

ROTARY PUMP AND ENGINE.

Patented in the United States, Feb. 6th, 1855, and in England, Ireland, Scotland, France and Belgium, 1855 and 1856.

Heretofore there has been considerable prejudice existing against Rotary Pumps; but we are happy to say that this prejudice is fast dying away, and Rotary Pumps are now pretty generally considered as the best in efficiency, durability, and in the small amount of power necessary to drive them, as compared with other Pumps, to raise a given quantity of water.

The great advantages of this Pump are its simplicity and durability.

In the working parts of the Pump, valves and packing are dispensed with; therefore it is not liable to get out of order. The cams or long cogs, on the piston, are packed simply by the action of water forced into grooves, planed into their ends for that purpose. The ends of the cams do not rub against the inside of the case, consequently there is but little friction to overcome; they therefore take less power to drive them than any other Pump. The mandrels are made of cast steel, which renders them very strong and durable in the parts where they are the most liable to wear.

They can be attached to power, either by belt or gearing. The Power Pumps are particularly adapted to the use of mills, factories, paper mills, distilleries, quarries, mines, docks, railroad stations, etc., etc.

In cases of fire, there is probably no arrangement for forcing water so perfectly reliable as one of these Pumps, suitably attached to power, as they throw a very large quantity of water, and to a great distance; and the construction of the Pump is such, that if, under the excitement consequent to a fire, the whole power should be applied suddenly to them, there need be no fear of their breaking. They can be run slowly, and raise water. The quantity raised is just in proportion to the number of revolutions the Pump is driven; and they can be run at a very high speed without injury. In this respect, they are entirely different from all other Rotary or Centrifugal Pumps.

There are now a large number of them in use in different situations and under different circumstances, and in no case have they failed to give the most perfect satisfaction. They are running in several places where other Pumps had entirely failed to operate.

POWER PUMP.

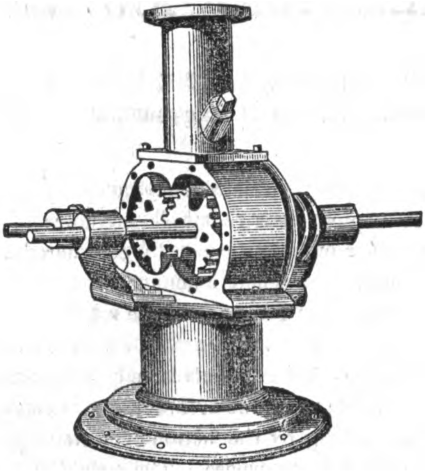


FIG. 222.

Above is a cut of a Power Pump, with one side of the case taken off to show the construction and the working parts of the Pump, which are two elliptical pistons working together and into each other; the water enters the case at the bottom, the stream divides and fills the chambers made by the long cams on each side and inside of the case; for instance (see cut), the cam pistons turn in together from the top, one chamber has just discharged and another discharging, another one on its way, and still another just filling; this gives a perfectly steady and uniform stream. It will also be seen that the suction is far more perfect than any Piston Pump can be made, for there are no dead points to it, as there are to a Piston Pump when the plunger is going down. In this arrangement, the instant you start the Pump it begins to exhaust the air in the suction pipe, and does not stop until the air is all out, provided the suction is not so long that the air cannot be exhausted by any Pump.

It will be readily seen that this Pump will not clog, nor is it at all likely to be obstructed in its operation, as anything liable to get into the suction would pass through the Pump without injuring it.

POWER PUMP, ON FRAME,

WITH TIGHT AND LOOSE PULLEYS.

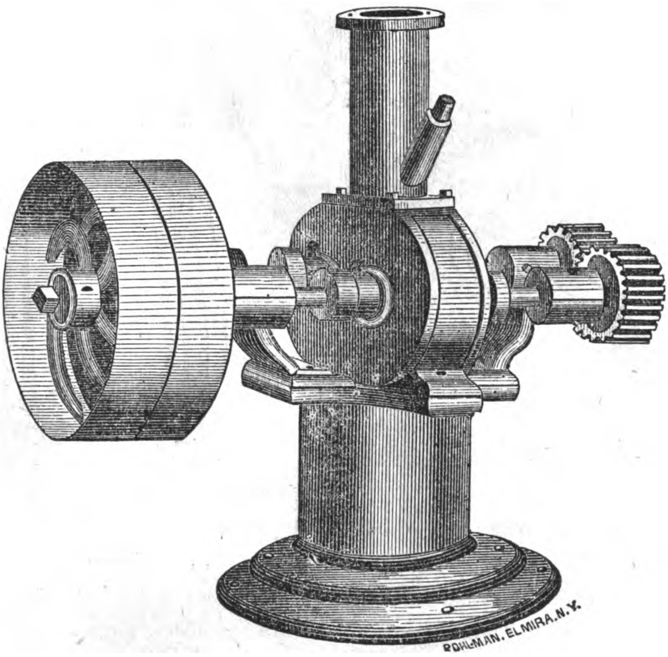

BOHLMAN. ELMIRA. N.Y.

Fig. 223.

This is a good-sized Pump for factories, where there is a reservoir under the roof for supplying the different stories of the building with water; also for paper mills, railroad stations, etc. It has outside white-metal bearings, and can be run with a 2½ inch belt, and raise a 2 inch column of water 100 feet, if required. The suction pipe should be 2½ inch bore; this size will raise from 100 to 150 gallons per minute. It is very easily set up, as the suction pipe has only to be attached, and the base of the Pump firmly bolted to the platform, and the Pump is ready for the driving belt. For constant use, this size may be run from 12C to 130 revolutions per minute.

STEAMBOAT AND SHIP PUMP.

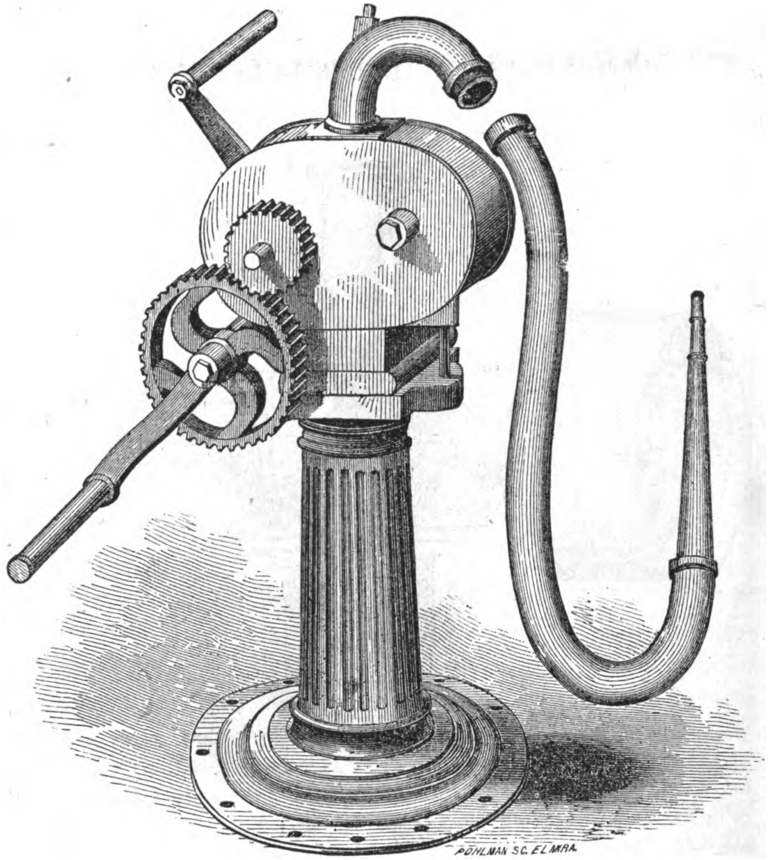


FIG. 224.

This Pump is intended for steamboats, ships, railroad stations, etc., to be used by hand; it is very powerful, and capable of throwing from 100 to 150 gallons of water per minute. One man can raise water from 10 to 15 feet, and force a five-eighth stream from 60 to 70 feet from the nozzle with ease. As it is a very strong Pump, and capable of throwing a large quantity of water, if sufficient power is applied, we put iron levers on each side, so that two or four men can work it, which may be very important in case of fire, etc. This Pump is recommended by the Board of Commissioners in the city of New York, to be the best Ship Pump ever introduced into that market. We warrant them to pump wet grain or any substance likely to get into the hold of a vessel. The suction pipe should be 2½ inch bore.

CISTERN,

OR

SHALLOW WELL PUMP.

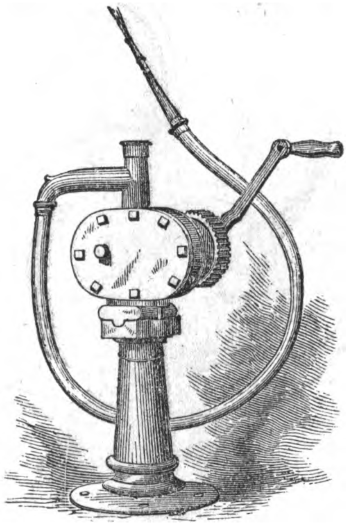


FIG. 225.

The above Pump is designed for cisterns or shallow wells, and will answer to force water into the upper stories of a house, bathing rooms, etc. It will also be found very useful in case of fire, by having hose handy to screw on the spout, which has a thread cut upon the end for that purpose, as one man can draw water six or eight feet and force it from sixty to seventy feet, through a half-inch nozzle. When the water does not have to be drawn over six or eight feet, a check-valve in the base could be dispensed with, and thereby do away with the danger of the Pump freezing up, even in an exposed situation. Water can be drawn from a greater depth without a valve, by holding a dipper of water to the spout and turning the other way, to prime the Pump. This we consider a very valuable Force and Lift Pump, and one that will come into general use. It is capable of throwing from thirty to forty gallons per minute.

The suction pipe to this Pump should not be less than $1\frac{1}{2}$ inch bore.

FORCE PUMP.

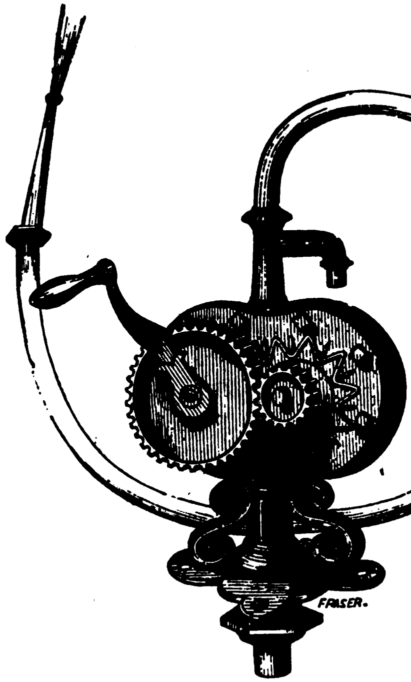


FIG. 226.

This Pump is intended for Garden Engines, washing windows, carriages, etc. It can be placed on a box, and one man can easily force a three-eighths stream of water from 60 to 70 feet. With this Pump, a Garden Engine of about one hundred pounds less weight can be made than those in general use, from the fact that the Pump itself is over fifty pounds lighter than others used for that purpose. In consequence of this difference in the weight of the Pump, the box can be made of a thinner and lighter material; in fact, you have a machine that one man can wheel anywhere, when filled with water; while the machine in general use is a load without water, which is the reason that they are so often abandoned after being used a few times. There being no valves or packing in the Pump, it is always ready for use, even after standing a year or more. All that is necessary is to pour a few drops of good oil into the Pump, when the machine is put away, to prevent its rusting. Another advantage in this

Pump is, that you can fill the box simply by dropping the hose into the cistern or reservoir and turning the crank in the opposite direction, as the Pump works nearly as well one way as the other. The suction hose should, however, be wired inside, as the ordinary hose will collapse if used for suction.

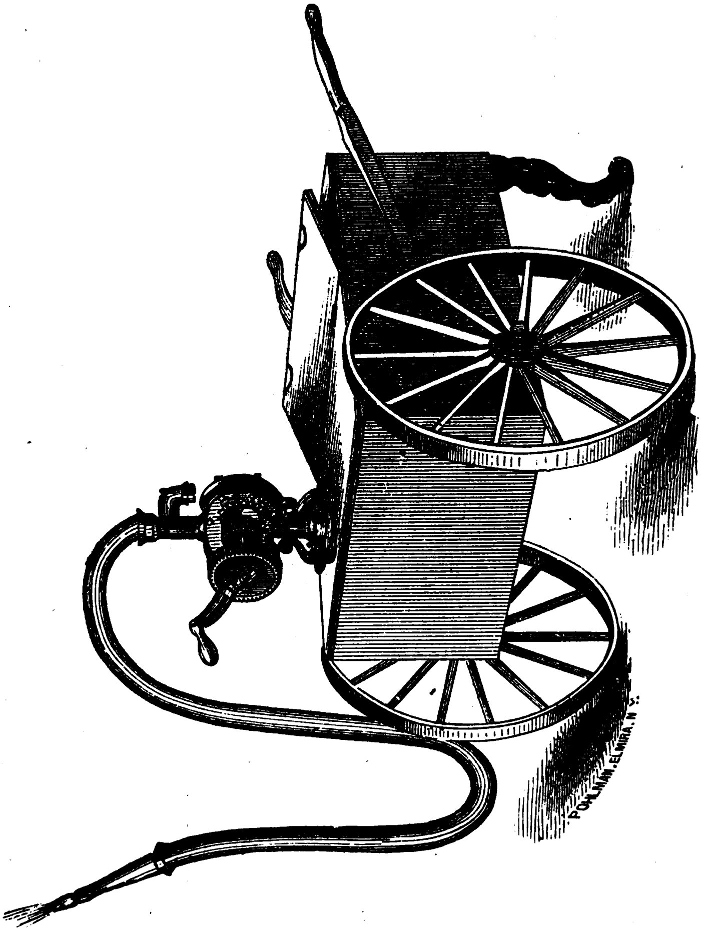

POHLMAN, ELMIRA, N.Y.

Fig. 227.

GARDEN ENGINE

Rigged with Pump same as shown on page opposite.

SUGAR CANE MILLS.

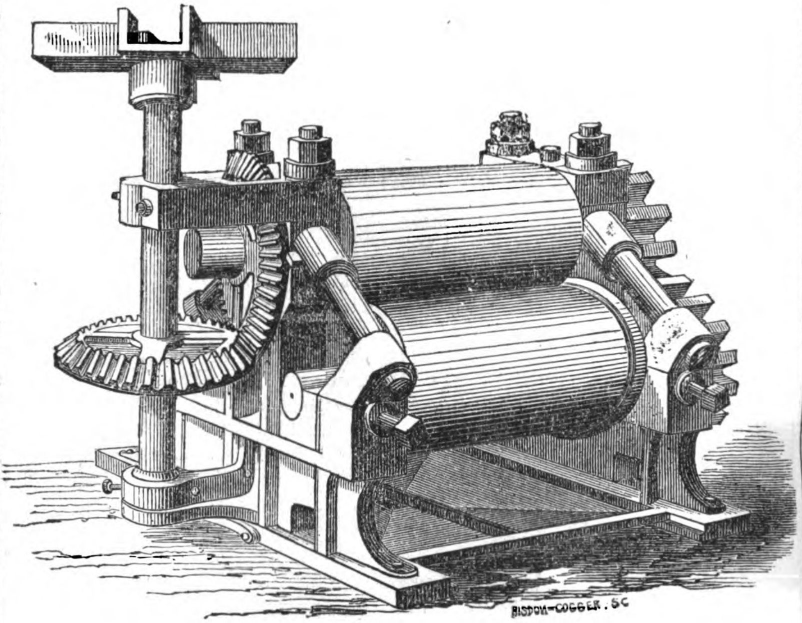


FIG. 228.

The above cut represents a small Horizontal Sugar Mill, with three rollers. It is made entirely of iron, with composition bearings, finished complete, in working order. It is made in the strongest manner possible. A beautiful piece of machinery, made to be driven by horse power, by water, or by a small steam engine. The Mill, as represented above, is arranged for horse power, requiring merely the wooden sweeps, to the ends of which are attached the horses or mules.

It is particularly recommended to planters of limited capital, who wish to commence the making of sugar, and to those who are located far into the interior of the country, South America, and in Mexico, where it is difficult to transport heavy machinery.

We manufacture them of several sizes, with rollers 14, 16, and 18 inches diameter, and of proportionate length.

SUGAR CANE MILLS.

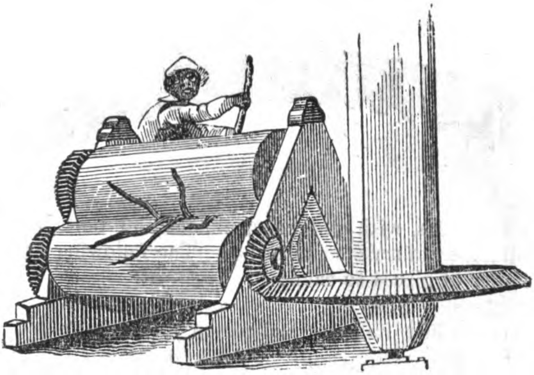


FIG. 229.

The above Mill is similar in form to the one on opposite page, but made lighter, plainer, and, of course, costs much less. The frame is of iron, strongly bolted together, and arranged so that it can be taken apart and packed for mule carriage. The wooden shaft, as represented, can be made where the mill is wanted, thus saving transportation and expense. They are intended to be worked by horses or cattle; but with an iron shaft and gear attached, can be operated with steam or water power.

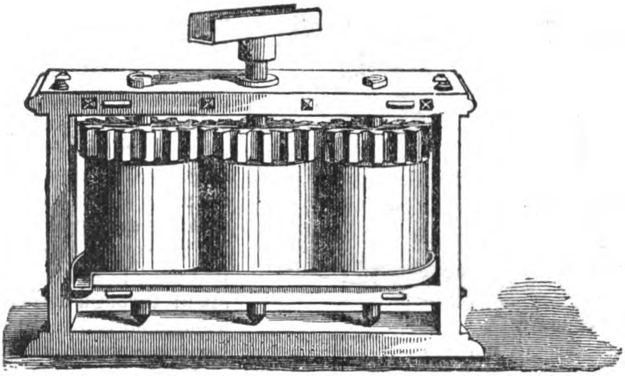


FIG. 230.

Vertical Roll Sugar Mills, for horse power, with wooden frame, sugar pan, etc., complete, ready for use, excepting the wooden sweeps to which the horses are attached. The following sizes constantly on hand:

1. Two Vertical Roll Mill, rolls 14 inches diameter by 16 inches long.
2. Three " " rolls 14 " " by 16 " "

GIN GEAR.

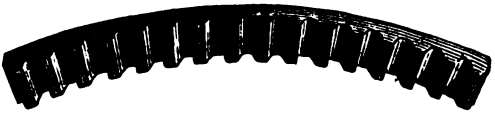


FIG. 231.

Cotton Gin Segments, with gudgeons, pinions and bolts, complete, from 6 to 13 feet diameter, furnished to order. The following are the sizes of wheels and number of pieces to each:

6	feet diameter	and pinion,	8	pieces.
8	"	"	8	"
9	"	"	8	"
10	"	"	12	"
11	"	"	12	"
12	"	"	12	"
13	"	"	12	"

EAGLE COTTON GIN.

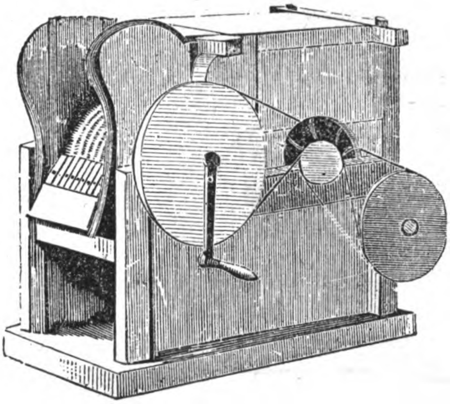


FIG. 232.

The attention of cotton planters is invited to these stands, as embracing important improvements recently made in their construction. By a peculiar method, the brush is made very strong, runs light, will not choke, and is warranted to stand against any necessary speed; and the patent air mote board is so arranged that the supply of air necessary for the operation of the brush is taken in at the ends of the stand through the ceiling into a flue, and is distributed to the brush in a more uniform, strong and even current than ever before obtained; by this means preventing most of the draft of air from the front of the stand, and enabling it to mote the cotton perfectly. Neither time nor expense have been spared in perfecting these stands, and they are offered to the public as machines combining all the requisites for making first rate cotton. The Gin represented in cut is made to be worked by hand; but we have them prepared for operating by horse, water, steam, or other power, carrying from 50 to 100 saws.

WALKER'S PATENT COFFEE HULLER.

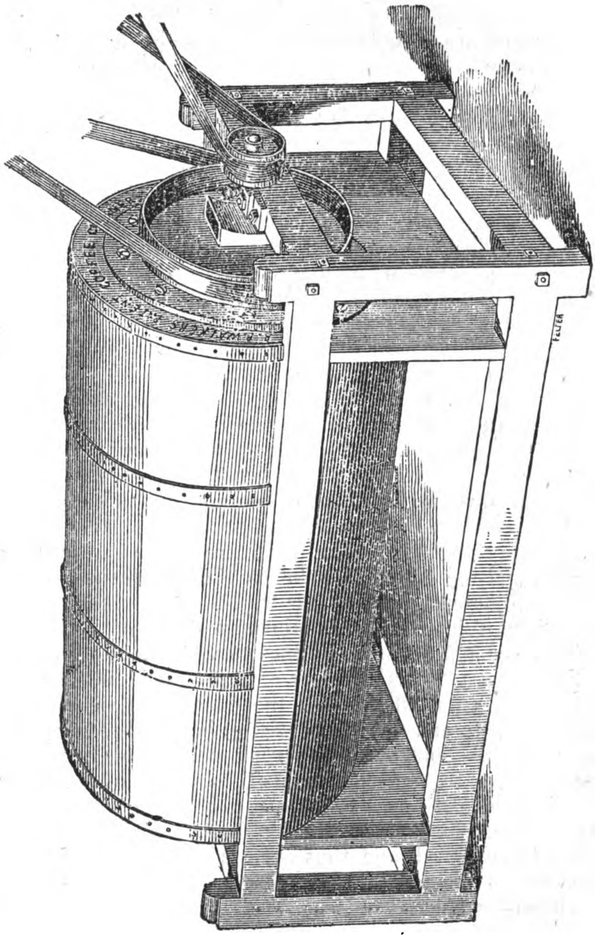


Fig. 233.

The importance of a machine to hull coffee thoroughly, can only be known to those familiar with the heretofore insurmountable difficulties attending the invention, and to persons acquainted with the enormous value of the coffee crop, amounting, as it does, in its aggregate, in different parts of the world, to the sum of over one hundred millions of dollars.

Ingenuity, perseverance, and inventive skill have heretofore been exhausted in vain to produce a machine to hull coffee without damaging it in any way, and, at the same time, do it rapidly. This machine is the result of six years' unwearied labor and attention to this subject, involving a large outlay of money; the result therefore is the more gratifying, by having the satisfaction of offering to those engaged in the culture of coffee a machine which combines simplicity, durability, and compactness, which will hull coffee perfectly, without bruising or injuring it in the slightest degree, while it preserves its pure, native freshness of color. During the hulling process, the dust and other foreign substances are drawn from the machine by exhausting the cylinders, thereby causing a current of air to pass freely through the coffee, freeing it at once from all foreign substances. By the old process of cleaning coffee, the dust and dirt were pounded into the grains, which not only hulled the coffee in a very imperfect manner, but broke and defaced nearly one half of it. It is only necessary to compare the coffee cleaned by these machines with the best samples cleaned by any other process, to see at once the difference, and prove conclusively their great value. The coffee is fed or enters the machine at one end, and is discharged at the other. The operation is so simple, that any person who can manage a common fanning mill will have no difficulty in working this machine. Experience in hulling coffee has proved that inhaling the dust which arises is more detrimental to health than is generally supposed. The method, therefore, of freeing the room or building from dust—by a conductor connecting with the machine, through which are forced all impurities into any reservoir that may be provided to receive them—has a very important bearing upon the interest of the planter, in preserving the health of those he employs: which saving alone would be more than the cost of the machine. The inventor has kept constantly in view to produce a machine in which is combined every improvement that skill could suggest; and after a thorough working trial, it has been pronounced entirely successful in every respect, and the favorable opinions thus expressed supported by large orders for different parts of the world. Attention is called to the superior manner by which mouldy or otherwise damaged coffee is restored to its original color and freshness by these machines. So perfectly is this done that, after repeated trials, judges of coffee could not distinguish the damaged, after it was passed through the machine, from that which had not been injured at all; and this has proved to be the case in restoring over 30,000 bags. The machines are very strong and durable, and will last ten years, in constant use, by replacing some of the parts most exposed to friction, which can be done at a cost of $20 per year. No material softer than iron and steel is used in them, in any part subject to friction. The coffee remains free and unconfined, and thus escapes unbroken. They will clean 100 bags per day, in the pod. It has always been supposed that two, or even three different machines would be necessary to begin and complete the process of hulling coffee, and remove the three different and distinct coatings or skins in which each grain is incased; this would at once involve an outlay of several thousand dollars, and render the labor just three-fold. The whole operation is concentrated in one machine, and the price is put far below its real value, in order that it may be within the reach of all. They can be taken apart and transported, with ease, upon mules, or otherwise, and can easily be set up and put running; it requires little power to drive them, and either steam, water, or horse-power may be made use of; two horses can drive them with ease. These machines only require to be seen, examined, and used, to be fully appreciated.

CLOVER HULLER.

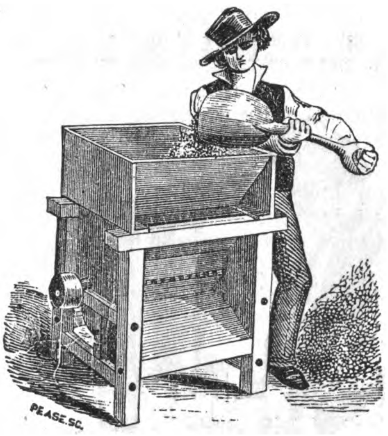


FIG. 234.

This machine is compact, simple and durable. It does its work perfectly, without injuring the seed, and is capable of hulling from 5 to 15 bushels of clover seed per day, with one horse.

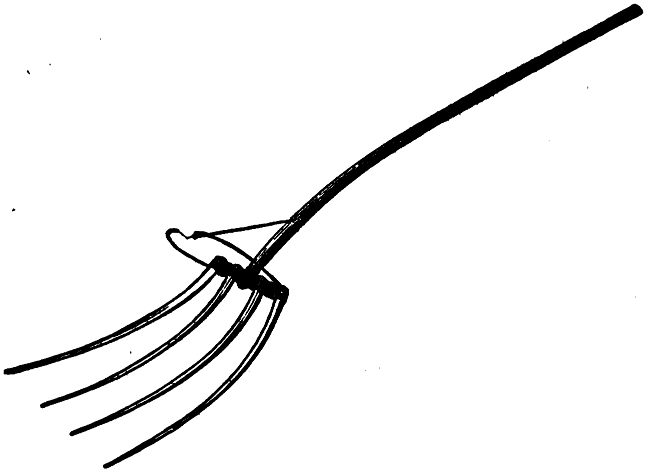


FIG. 235.

Straw and Grain Fork—An improvement on the old stylo, both for convenience and wear. They have been but a short time in the market, and are already much liked.

PORTABLE
MORTISING MACHINE.

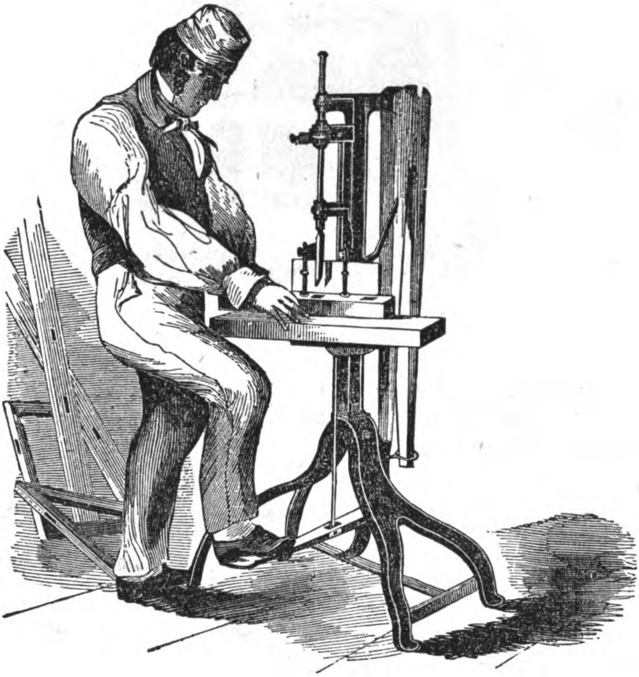


Fig. 236.

The above cut represents our Portable Mortising Machine, No. 1. It is a very perfect and desirable machine, and is fast coming into general use. It works easily, and with the greatest precision; is firm and solid, the foot supports and standard being of iron, and at the same time portable, the whole weighing but 150 lbs. There are three best cast-steel chisels, $\frac{3}{8}$, $\frac{1}{2}$, and $\frac{5}{8}$ inch, with each machine.

The table is adjusted to the standard by a lever, and elevated or depressed by a bolt and screw. The chisel is turned by a lever with a spring latch. The machine occupies but little room, say 22 by 28 inches on the floor, and is not liable to get out of order. The cost is trifling, in comparison to its real value to the practical mechanic.

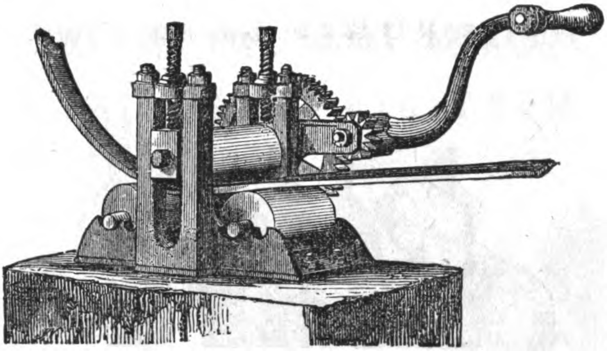


FIG. 237.

Tire Bender—for Bending Tire for wagons and carriages. A machine highly approved by carriage makers and blacksmiths.

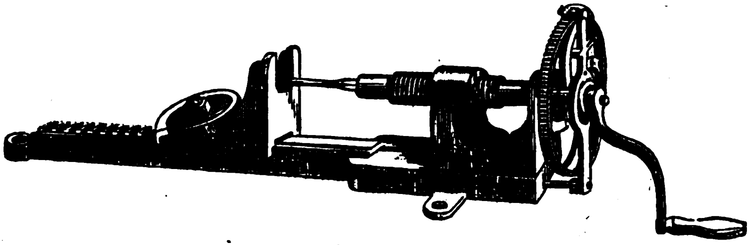


FIG. 238.

Taft's Self-feeding Hand Drill. This is a new and very efficient horizontal Drill, for blacksmiths and shop use generally. Its advantages consist in its variable, self-feeding motion, leaving the workman free to hold the article drilled with one hand, while the other operates the Drill.

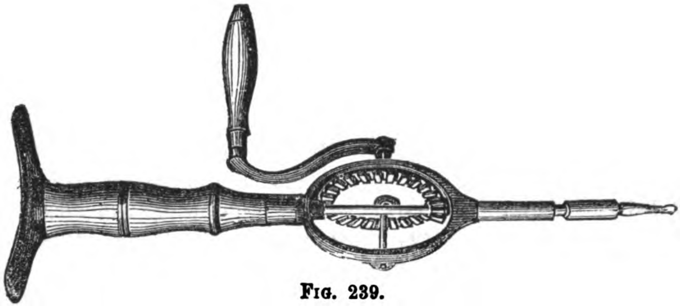


FIG. 239.

Hand Drill Stock, with Drill.

PORTABLE FORGE AND BELLOWS.

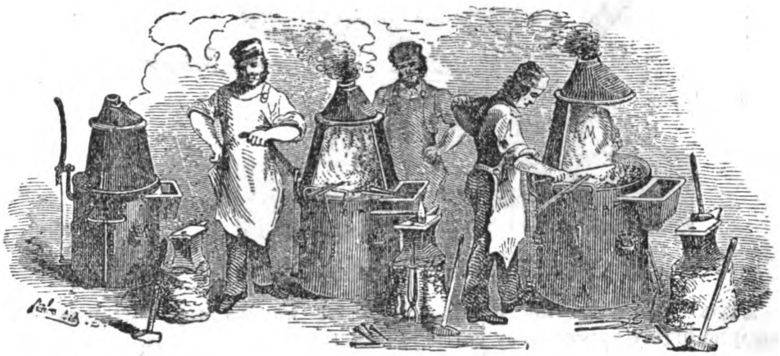


FIG. 240

Queen's Patent Portable Forge and Bellows is offered to the public as the best in use for blacksmiths, gunsmiths, shipping, plantations, manufactories, boilermakers, machine shops, armorers, coppersmiths, gas fitters, musical and optical instrument makers, chemists, miners, quarries, builders of railroads, public works, etc. The above engraving shows a few of the many different positions in which the slides can be set to protect the fire from wind or rain when used out-doors, or for safety and other purposes in-doors. These Forges can be set where most convenient for light and room, and the smoke carried off by a pipe. There are six sizes of blacksmiths', coppersmiths', etc., Forges, and five sizes of jewellers', dentists' and chemists'.

These are the only round Forges made with slides; they supersede all others, having been in use for eleven years past with entire satisfaction. It is compact—the Twier iron is of a superior construction—heats the iron in the quickest manner—the wind escapes from the hot-air chamber through several holes in the Twier cap, which, being under the fire, prevents the Twier from getting filled up with coal and ashes, as it will where there is but one opening. For out-door work and for safety in-doors, these Forges have great advantages over others, having two slides, by which the Forge can be closely shut up, or can be placed in any possible position necessary to prevent any interference by wind and rain when in use out-doors, and for safety in-doors: they are so constructed that fire or water cannot injure the Bellows, which is in the cylinder under the fire bed. These Forges weigh each 85, 126, 185, 230, 325, and 437 lbs.; they are 1 ft. 8 in., 1 ft. 9 in., 2 ft., 2 ft. 3 in., 2 ft. 6 in., and 3 ft. in diameter; and the extreme heights are 3 ft. 10 in., 3 ft. 10 in., 4 ft. 2 in., 4 ft. 4 in., 4 ft. 8 in., and 4 ft. 9 in.

BORING MACHINES.

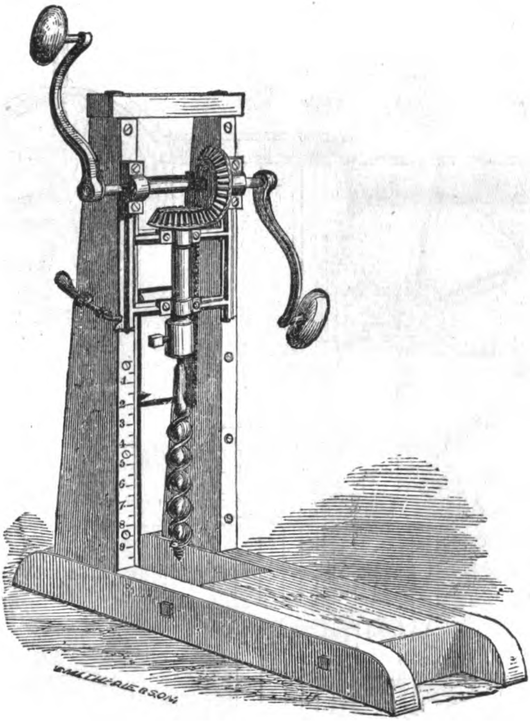


FIG. 241.

Improved pattern, arched gate, with 1 inch, 1½ inch, and 2 inch augers. The Borer, as represented above, now ranks among the first class labor-saving machines. It is designed expressly for the use of builders and carpenters, for boring mortise holes in timber when framing buildings, and is also a very great help to the farmer or planter in making fences.

We make the irons of this machine, including the small gears, entirely of malleable or wrought iron, so that we can warrant every part to run easy, without play. This machine is simple in construction and operation; it is readily attached to the top of the timber, when the workman sits himself across it, operating the auger by turning the two cranks, one with each hand, and readily performs quadruple the amount of work, more perfectly than with the common auger. By shipping a gear into an upright rack on the post, and the same motion of the cranks, the auger is quickly drawn out. For transportation, they are packed 2, 3, 4, or 6 in a case.

Oil the bearings before using the machine.

PORTABLE STEAM ENGINE.

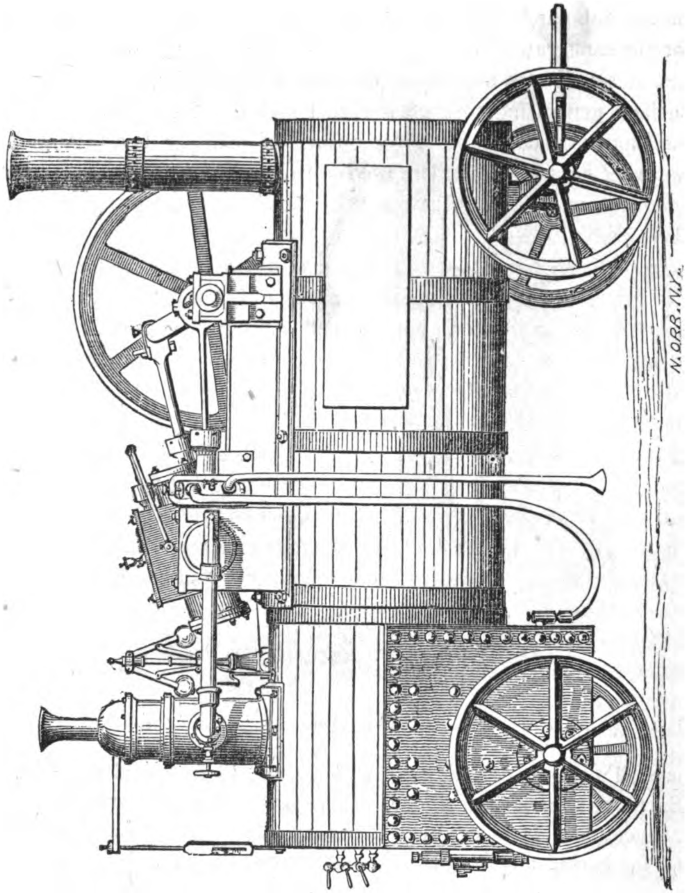


Fig. 242.

These Engines are made of 4, 5, 6, 8, 10, and 12 horse power, of the best material, and in the most approved manner, for effectiveness, safety, durability and economy.

They comprise in their construction the most modern improvements, oscillating cylinders, greatly reducing the number of working parts, and the friction consequent, thereby increasing the power, over the ordinary horizontal Engines; they are much less liable to get out of repair, easier to be understood, and can be managed by the plainest mind. The cylinders are fitted with a double metallic ring piston and cast steel piston rod. Each Engine is furnished with a governor, which entirely controls the Engine, regulating its speed under all changes and irregularities of the work; also pumps, safety-valves, grate-bars, etc. Each Engine is fastened upon a locomotive tubular boiler, of a larger size than furnished by any manufacturer for the same rate of horse-power. These boilers are well known by engineers as superior to any other construction of boiler, presenting greater fire surface, generating steam faster, and with less fuel. The Four Horse Power Engine consumes but three bushels of coal per day. These boilers are an exact copy of the boilers used in railroad locomotive engines. They are complete, with fire box, and are furnished ready for firing up on reaching their destination.

We confidently recommend these Engines as a substitute for manual labor, for pumping, hoisting, sawing, grinding, threshing, to agriculturists, miners and mechanics, for printing, and for every conceivable use where power is required. We furnish them with wheels, and without; when furnished with wheels (as represented in the cut), they can be moved with the greatest facility—the Four Horse Power Engine requiring, on a level road, but a single horse; thus being admirably suited for hiring to parties on different farms and plantations, for threshing, grinding, sawing, or other purposes. The working parts of these Engines are fitted with the same care that is used in erecting the best marine engines. Those who have used them, claim them as the most powerful and economical steam engines in use.

THE FOLLOWING IS A LIST OF

SIZES AND DIMENSIONS.

	Diameter of Cylinder.	Stroke.	Length of Boiler.
OSCILLATING CYLINDER.	4 inch.	12 inches.	7 feet 5 inches.
" "	4½ "	12 "	7 " 8 "
" "	6 "	15 "	8 " 10 "
" "	8 "	18 "	9 " 9 "
HORIZONTAL CYLINDER.	6 "	13 "	8 " 4 "

	Dia. of Sheel or Cyl. of Boiler.	Dimensions of Furnace.	Tubes.
OSCIL. CYL.	25 inch.	21 in. wide × 24 × 24 high.	20–2 in. tubes 4 ft. long.
" "	27 "	25 " × 24 × 24 "	20–2 " 4½ "
" "	30 "	26 " × 32 × 39½ "	31–2 " 5 "
" "	36 "	31½ " × 35 × 39 "	41–2 " 6 "
HOR. CYL.	30 "	25 " × 31 × 26 "	27–2 " 4½ "

PORTABLE STEAM ENGINE.

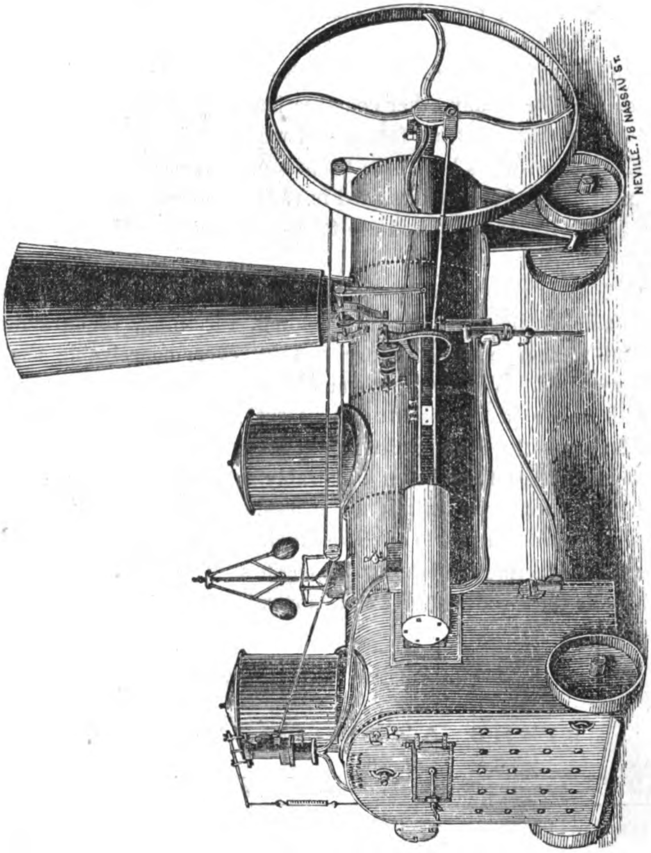

NEVILLE, 78 NASSAU ST.

Fig. 243.

The continued and increasing demand for Agricultural Steam Engines, fully proves the advantage to be derived from their use; while the withdrawal of labor from agricultural districts necessitates the employment of machinery, which will, at the same time, diminish the cost of production and economize labor. This Engine has two cylinders, is made with a fire-box, and the boilers are, in all respects, the same as those used in locomotives on railroads. We have them of 4, 6, 8, 10 and 12 horse power, complete and ready for use. They are well adapted for threshing, sawing, grinding, pumping, and other agricultural purposes; having but few working parts, there is but little liability to get out of order. The cylinders and machinery being placed on the side, they are easy of access in case of derangement.

STATIONARY STEAM ENGINE.

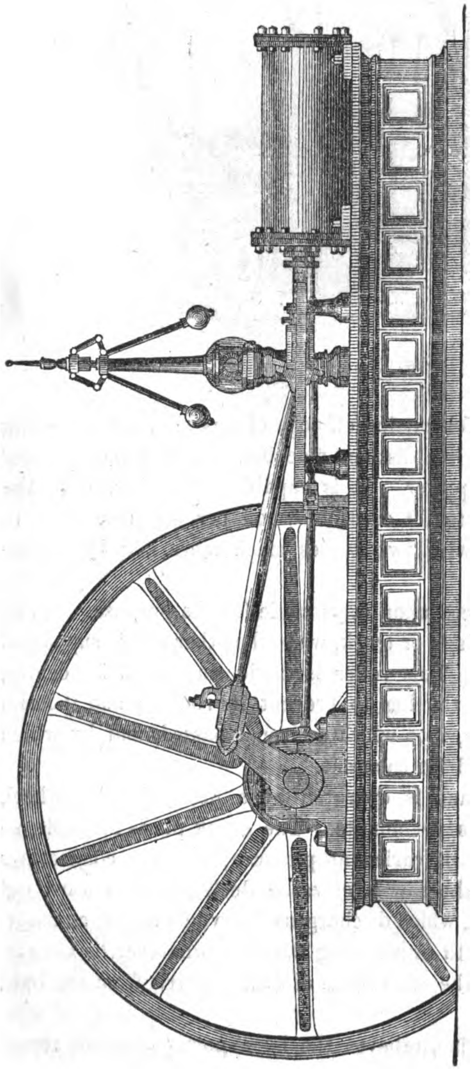


Fig. 244.

The great improvements which have been made in Steam Engines, render them the best and most economical motive-power for mechanical, manufacturing, or agricultural purposes. There is, however, a vast difference in the construction and build of Engines, both as to their finish, durability, working qualities, and the amount of power obtained from the same sizes—some being made so complicated, and the relative parts so disproportioned, that most of the power is exhausted in operating itself. The large amount of friction thus produced strains hard upon all the working parts, causing them to heat and wear, and in a short time the whole becomes useless. We would here say to all parties wishing to purchase Steam Machines, that with our long experience, practical knowledge and great facilities, we are enabled to furnish Engines of simple construction and known superiority—those that will work up to their full capacity with safety and durability, and consume the smallest amount of fuel. We are now prepared to supply them complete, with boilers, pumps, and all other connections, of from 4 to 200 horse power, suitably arranged to drive by belt or gear.

EMERY'S DRAG CROSS-CUT SAW MILL.

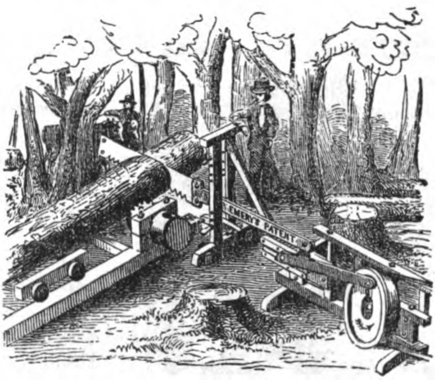


FIG. 245.

This machine is intended for cutting off logs of any size, for lumbering purposes or for fire wood. It is a distinct machine, and may be operated by a belt from any suitable power. It is capable of cutting, with the power of one horse, from 20 to 30 cords of wood per day according to the size and kind of wood; with two horses much more may be accomplished.

The log to be sawed is placed upon ways made for the purpose, one end resting upon a travelling carriage or truck, while the other end is supported by a stationary spiked roller. This roller is made smaller at its centre, forming a kind of saddle for the log to prevent its rolling; and it has a mortised head, like a capstan, into which a lever is passed, and by which the log is easily moved forward for each cut.

The saw cuts both ways, and is operated by a heavy balance-wheel, making about 130 revolutions per minute. The crank pin is movable, so that the length of stroke may be varied at pleasure; and the connections are so made that the heel of the saw is elevated during the outward cut and depressed while returning, which discharges all sawdust as fast as made, preventing clogging of the teeth or resawing the dust, whatever be the size of the log. It also prevents the drawing in of dust and grit from the bark to dull the saw.

This being a distinct machine, relieves the horse-power from the thrust and strain of the saw, thus saving much wear and tear of the horse-power, and can be propelled by a band from any horse-power, or in mills by water or steam power.

EMERY'S

CIRCULAR SAW MILL.

AS USED IN CUTTING WOOD, AND DRIVEN FROM A PULLEY ON THE OPPOSITE SIDE.

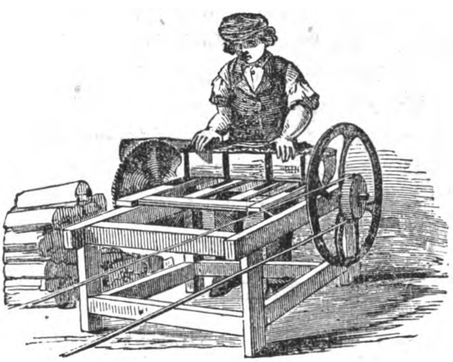


FIG. 246.

This cut represents a saw bench or frame, with a slide-table or carriage, upon which the wood is placed, and by the operator is pressed against the saw and cut off in lengths as desired. The distance between the saw and fly-wheel is about 3½ feet, and is calculated for cutting up wood when in four foot or cord-wood lengths. The saw furnished is 24 inches diameter, and warranted plate, all filed and set in running order. The fly-wheel weighs about 125 lbs, is about 26 inches in diameter, and revolves about 1,000 to 1,200 times per minute. The fair estimate for a day's work for one horse is from 12 to 15 cords of hard wood twice through per day of 10 hours; with two horses it will cut all that can be handled by five men, say 20 to 30 cords per day. This arrangement is almost universally used throughout all the railroads in the Western States, and almost invariably the Emery Power and Mills are adopted, to the exclusion of all others.

By attaching a table board, and changing the saw, they can be used for slitting boards and plank, for fence or sash stuff.

MILL IRONS AND MACHINERY.

The manufacture of Mill Irons and Machinery, with Vail's stamp, has been known throughout the country for nearly fifty years. The character of their articles has not varied as to quality of material, while the workmanship upon the articles named in this list is second to none.

We are now prepared to execute all orders with promptness, and, for the most part, have a stock on hand. We desire to call the attention of the trade to the fact, that having been engaged in the business of furnishing Millwork, of every kind, we are well acquainted with the wants peculiar to each kind of work, and can therefore readily understand what is wanted, where, even by the merchant, the order is not easily comprehended.

Sugar Mill Rolls, Shafting, Gearing, Pulleys, etc., made to order with dispatch, and in the best manner.

Saw Mill Irons, etc.

Gudgeons of all sizes.
Wrought-iron Bands for Gudgeons.
Circular Saw Mandrels and Boxes.
Circular Saw Tables, with movable top.
Upright Saws, for crooked and scroll sawing.
Gearing, Shafting, Pulleys, Hangers, etc.
Lumber Screws, for hoisting logs.
Log Chains and Dogs, for hauling.

Grist Mill Irons.

Wrought-iron Grist Mill Spindles, cast-steel points and steel collar.
Cast-steel Mill Picks.
Bolting Cloths.
Portable Grist Mills.
Gearing for Grist Mills and Shafting, fitted up, complete.
Flanges for Water Wheels.

Miscellaneous.

Drills, for boring rocks.
Hand Drills, for blacksmiths.
Drilling Machines, upright.
Lathes, for iron or wood.
Screw Plates, or Stocks, and Dies.
Cart Axles and Boxes.
Blowers, for blacksmiths.
Pulleys, Couplings, Hangers and Shafting.
Saw Mills, for slitting or splitting boards.
Hand Drills.
Ratchet Drills.
Ratchet Wrenches.
Press Screws, for tobacco oil, cotton, etc.
Portable Ship Cotton Presses.
House Screws, for raising houses.
Cider Press Screws.
Timber Screws.
Screws for pack'ng Dried Fruit.
Fan Mill Castings.

SAW MILL IRONS, ETC.

A PAIR OF HOTCHKISS'S WATER WHEELS.

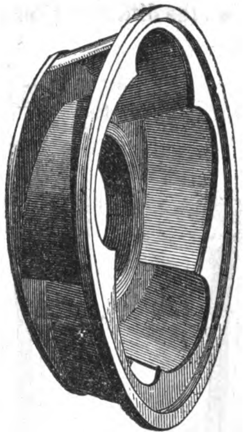


FIG. 247.

LEFT HAND.

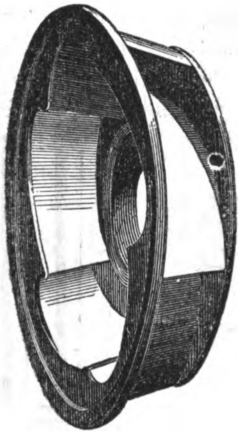


FIG. 248.

RIGHT HAND.

The above cut represents the Wheels in their working position, when hung upon a shaft. A description of this, the cheapest and almost invaluable Water Wheel, for the purpose to which it is applied, would be unnecessary, it being so well known among all millwrights.

We have them of the following sizes, faces turned:

28 inch diameter, requiring 5 feet head and fall.
34 " " " 8 " "
40 " " " 12 " "

Saw Mill Irons of every variety on hand, and manufactured to order, some of which are represented by the annexed cuts.

WROUGHT SAW MILL CRANK.

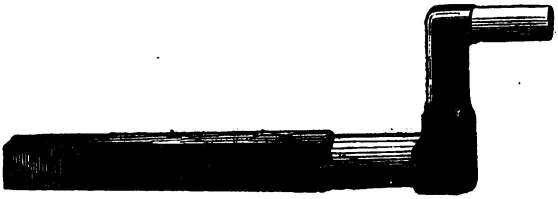


FIG. 249.

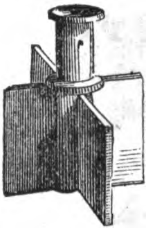


FIG. 250.

Hotchkiss Gudgeon.

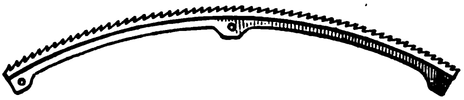


FIG. 251.

Rag Irons, of all the different sizes required.

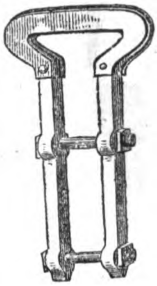


FIG. 252.

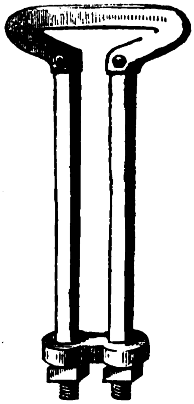


FIG. 253.

Pair of Patent Stirrups.

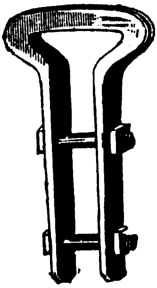


FIG. 254.

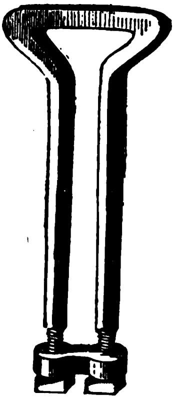


FIG. 255.

Pair of Heavy, or Solid Stirrups.

FIG. 256.

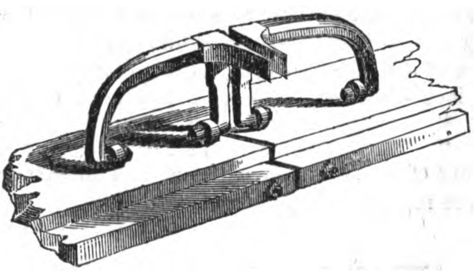
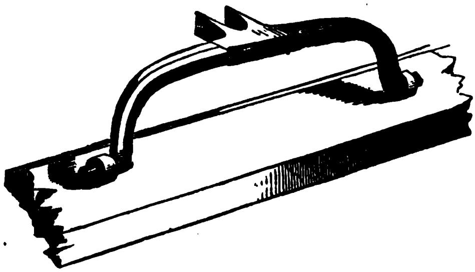


FIG. 257.



Set of Saw Mill Dogs.

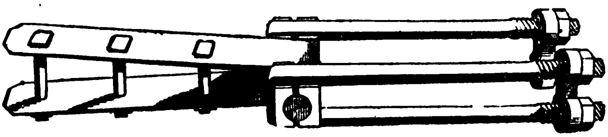


FIG. 258.

PITMAN,

With brass or iron boxes

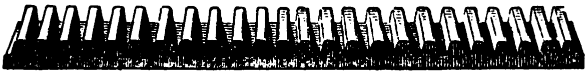


FIG. 259.

CARRIAGE COGS.

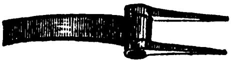


FIG. 260.

PAWL, FOR RAG WHEEL.

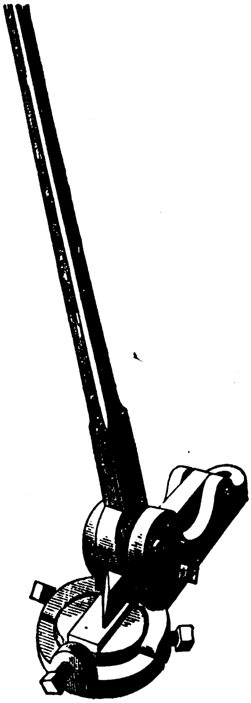


FIG. 261.

SAW-GUMMER.

This invaluable tool to the sawyer has only to be used to be fully appreciated; hundreds of dollars may be saved by this tool in time and files. No saw mill should be without one.

Bits and Dies are fitted for gumming the teeth of cross-cut saws.

MANDRELS FOR CIRCULAR SAWS,

Warranted perfectly true, with brass boxes, bolts and nuts, of the following sizes:

Nos.	Sizes of Saws.	Diameter of Flanges.	Diameter of Pulley.	Face of Pulley.	Length of Shaft between Journals.	Hole in Saw.	Diameter of Journal.	Length of Journal.
1	7 to 12	3	3	3	18	1	0⅞	2
2	14 to 18	4	4½	4½	19	1¼	1	2½
3	20 to 24	4½	5	4½	21	1⅜	1⅛	3
4	26 to 28	5	6	6	22	1½	1⅛	3½
5	30 to 36	6	7	7	26	1⅝	1¼	4
6	38 to 44	8	9	9	28	1¾	1⅜	4
7	46 to 48	9	11	11	30	2	1½	5

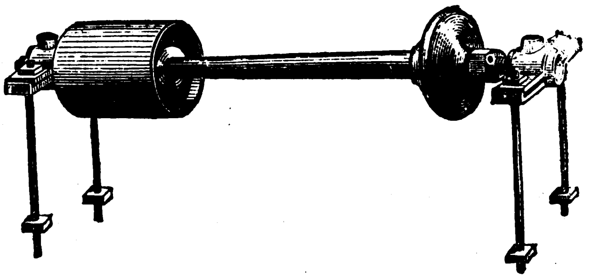


FIG. 262.

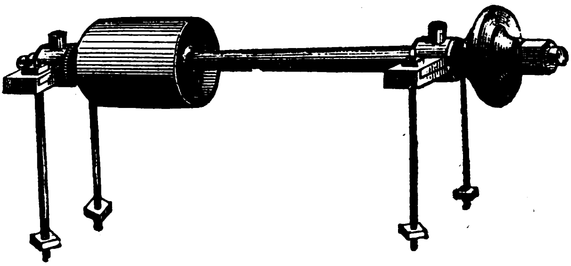


FIG. 263.

This pattern is arranged for the flange to run outside the boxes, as the saw can then be removed without shifting the Mandrel from its bearings.

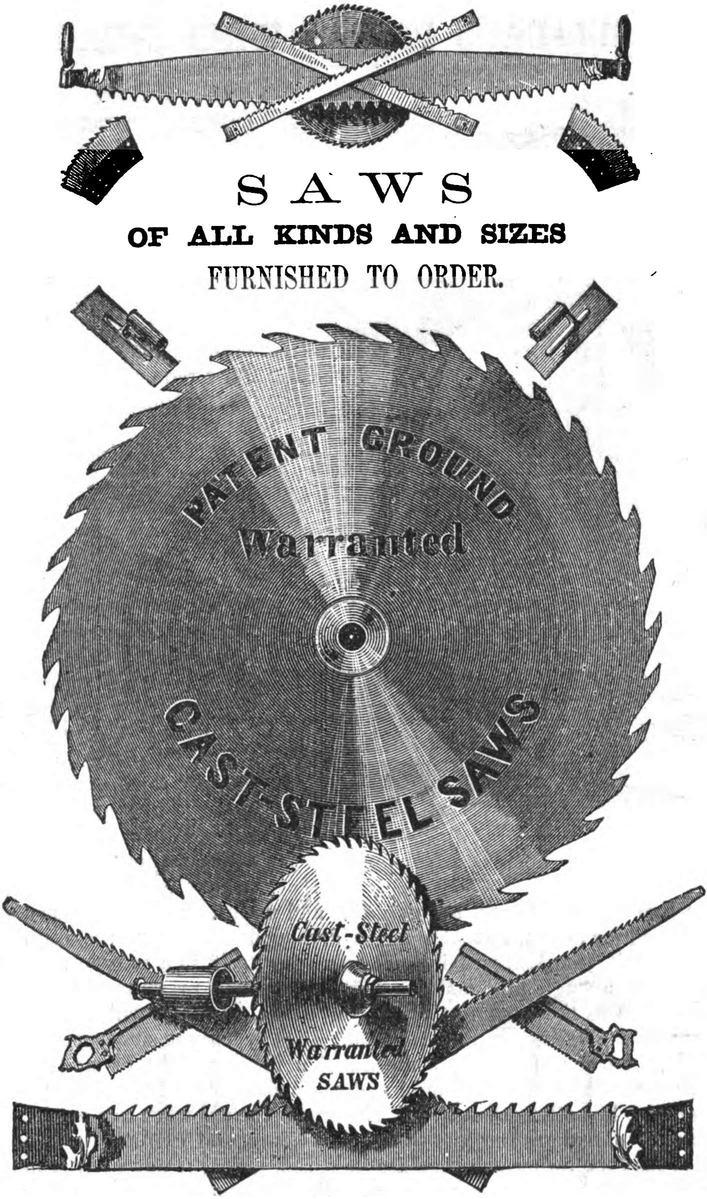


Fig. 264.

These Saws are carefully hardened and tempered, and are ground and finished by machinery designed expressly for the purpose.

HALLADAY'S PATENT WIND ENGINE.

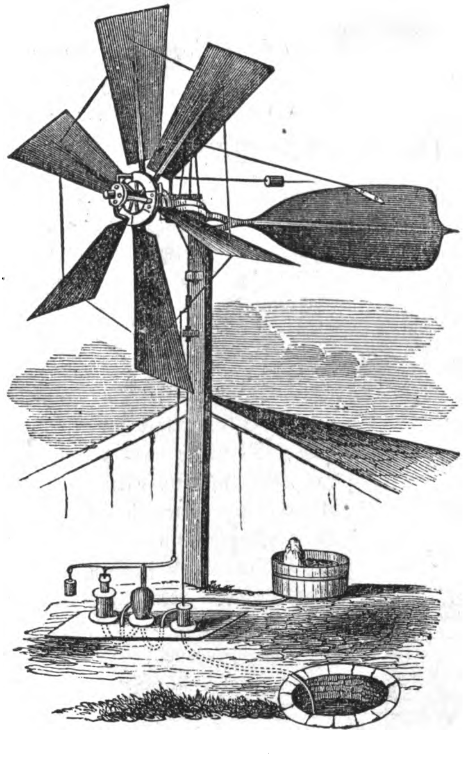


Fig. 265.

Repeated experiments had nearly discouraged the use of the wind as a motive power, until Halladay's Mill was introduced. The wind-wheel, as heretofore constructed, in high winds revolved with such velocity that it soon destroyed itself, or greatly injured any kind of machinery attached, besides requiring the constant watchfulness and care of the attendant. These difficulties are now entirely obviated, by a simple and ingenious device; as the wind increases, the sails gradually turn from the angle at which they are set for a common breeze, and present less and less surface or resistance to the wind, till finally, when the tempest is raging at its height, little is opposed to its power save their thin edges. The steady, uniform motion thus produced renders the Mill and machinery worked by it as safe and durable, without an attendant, as that carried by the common water-wheel. It will not only furl and unfurl, or spread its own sails, as required for safety, but can be so arranged that when the cistern or trough is full, the Mill will immediately stop itself, in a safe position, with nothing but a single post and the edges of the sails presented to the wind; and, as soon as the stock use any of the water, the Mill will again spread its sails to the breeze, and fill the tank; thus, when not convenient to have the waste water run back into the well, no ice in winter, or mud in summer, is made about the trough, and the machinery will be more durable and require less oiling than if left running for hours when not needed, and no danger of exhausting the well. A striking and useful feature of this Mill is that the owner can regulate its speed, giving it any desired motion, from 3 to 30 revolutions per minute. They are made of six sizes, carrying from 4 to 10 fans, and from 6 to 16 ft. diameter. With an order, a statement should be made of the quantity of water required per day, the depth of the well, and the whole height the water is required to be raised, that we may be able to send the size Mill and Pump most suitable for the location.

IMPROVED BRICK MACHINES.

Various efforts have been made for a series of years, in this and other countries, to apply machinery to the manufacture of Bricks, for the purpose not only of economizing time and labor in the process, but to secure an exactness in shape and edge not attainable in moulding by hand. In these experiments, the practicability of making Brick by compressing clay, in its natural state, has been fully tested. In the numerous machines invented for this purpose, difficulties have arisen which rendered their operation partly or wholly impracticable—some from their complication and liability to get out of order, others from the great expense of construction, but most from a failure to produce a uniform pressure; or, in other words, that kind of pressure which would completely break up the original formation of the clay, and thoroughly unite or knead the different particles. We offer with confidence this improved machine as one worthy attention, and as one in which all these difficulties have been overcome; it is very strong, simple in construction, has but few wearing surfaces, requires but little power to drive it, and but few hands to attend it. It is self-feeding, and self-delivering, and operates with great certainty and accuracy, and will make with ease 15,000 to 25,000 bricks per day.

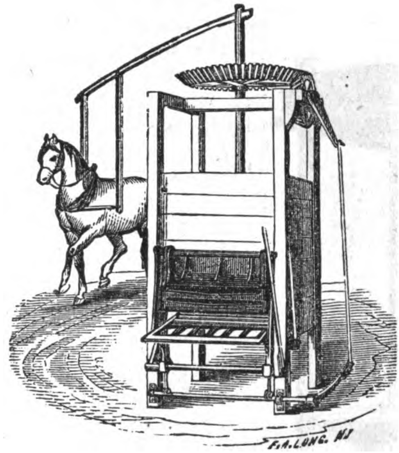


Fig. 266.

Horse Power.

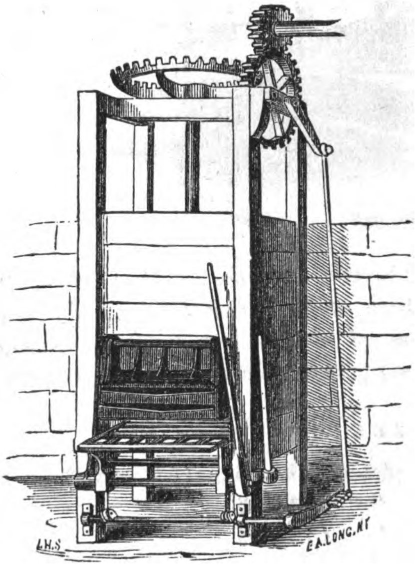


Fig. 267.

Steam Power.

HYDROSTATIC PRESS.

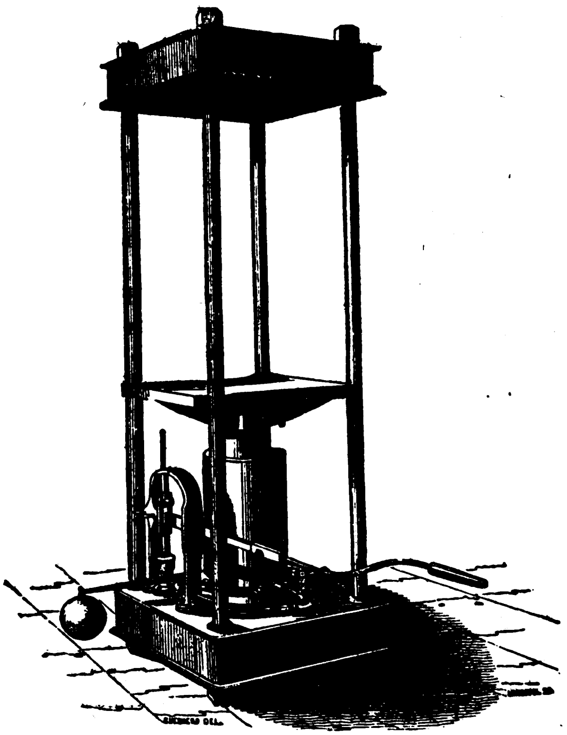


FIG. 268.

This is the most powerful of hand presses, and from its immense force, is well adapted for expressing oil from seeds, raising buildings, pressing printed sheets, etc. The cylinders are of wrought iron, the stand and top of very heavy cast plates; and every part is finished in the best manner.

SIZES.

8 in. Ram, with Single Pump, platen 40 by 26 in. (6 ft. space).
10 " " " " 44 by 28 "
12 " " " " 46 by 32 "

Larger or smaller sizes made to order, and presses to work by steam power.

IMPROVED SCREW STANDING PRESS.

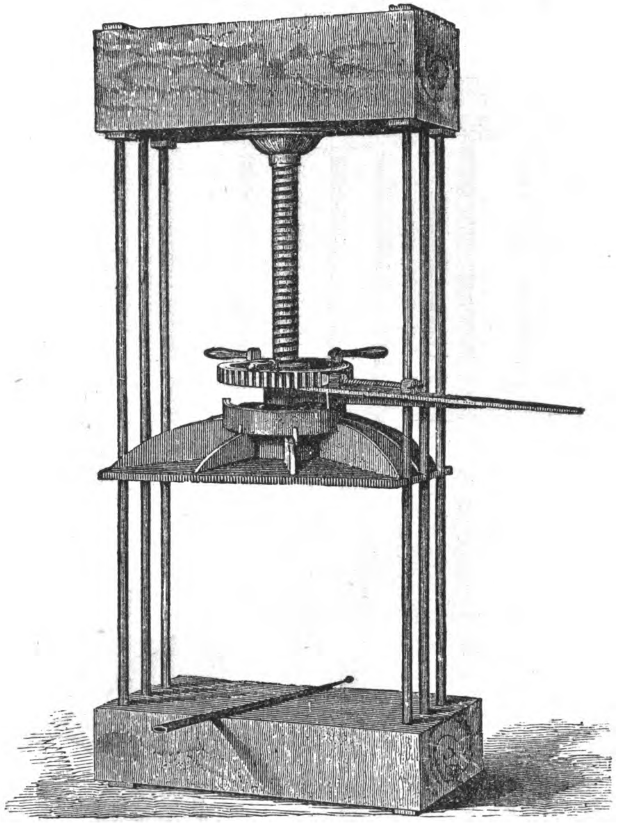


FIG. 269.

Above is shown a Standing Press, with a wrought iron, fagoted screw, with hardened steel point, composition box, and cast iron platen planed true on the face; it is operated by a ratchet wheel, pawl and lever. The head and bottom are made of the best white-oak timber, well seasoned, and secured by iron plates, bolts and nuts, and connected by wrought iron rods, with screws and nuts above and below. The uses to which this Press can be put will readily suggest themselves to any one needing a Press. For re-pressing drygoods, and bales of tobacco, they have no equal. We furnish the following sizes, with, or without the gear wheel and iron platen:

2½	inch Screw,	between rods	28	inches.
3	“	“	30¼	“
3½	“	“	31¾	“
4	“	“	33¼	“

BULLOCK'S
PROGRESSIVE POWER PRESS.

This represents a Cotton Press of the first class made of heavy timber and framework, all of which should be made on the plantation except the iron work. 2,000 of these Presses are now in operation in the cotton growing States. Weight of bales 500 to 600 lbs, in 25 cubic feet. With the iron work is furnished bills of timber, and full instructions for setting up.

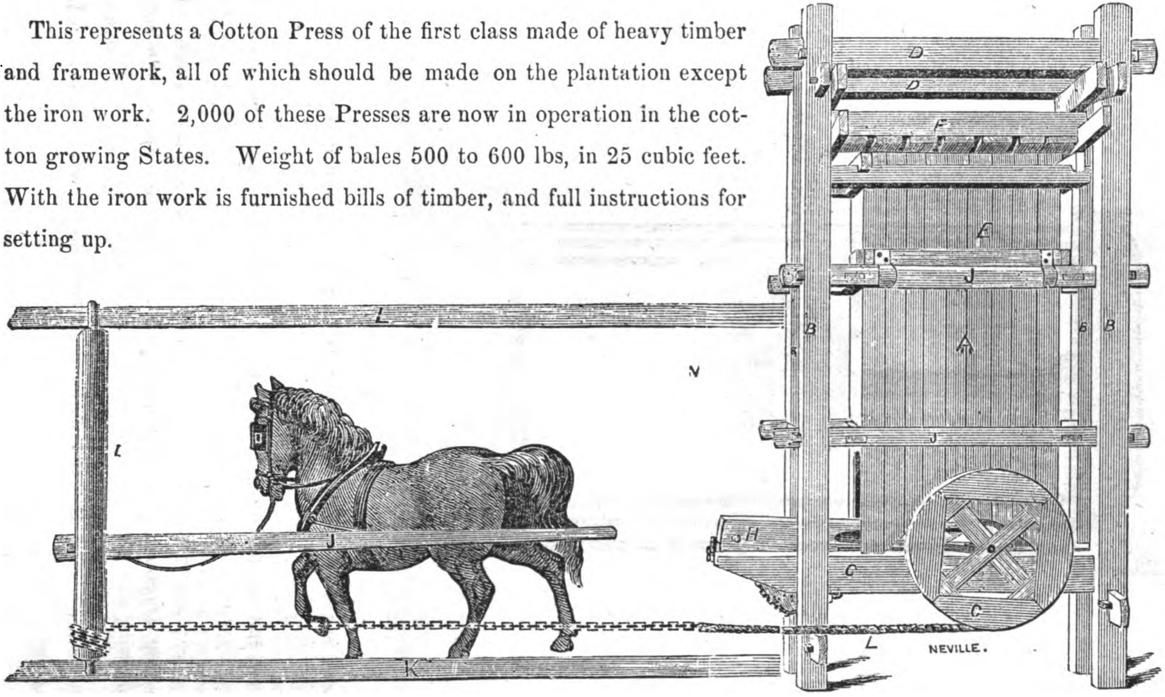


Fig. 270.

PORTABLE HAND PRESS.

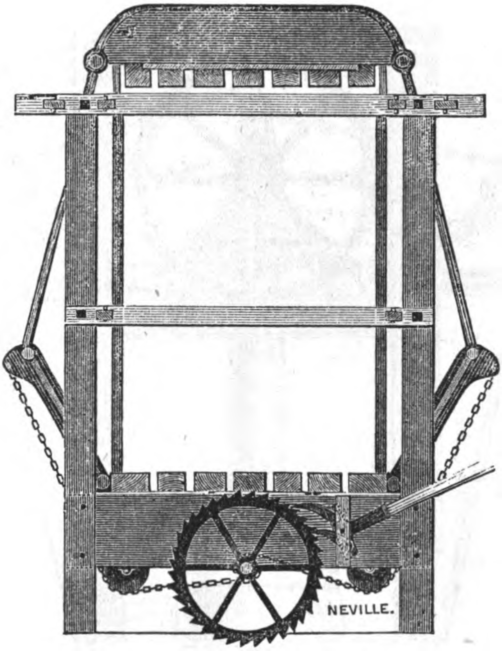


FIG. 271.

Fig. 271 is a side elevation of a Portable Hand Press, for baling hay, cotton, wool, flax, hemp, hair, moss, husks, straw, hops, etc. The follower of this Press works down upon the bale, and when elevated to the top of the Press, can be moved one side to leave the top of the box open, so that the Press can be refilled. The doors open on the back and front, and turn down out of the way, so that the bale can be bound and taken out on either side. We make two sizes, suitable for 200, 300, and 400 lbs. bales of hay. The cut represents the Press with the side boards or doors taken off. The number of bales pressed per day will depend upon the number of men employed and the conveniences for working: twenty bales is a fair day's work.

TOBACCO PRESS.

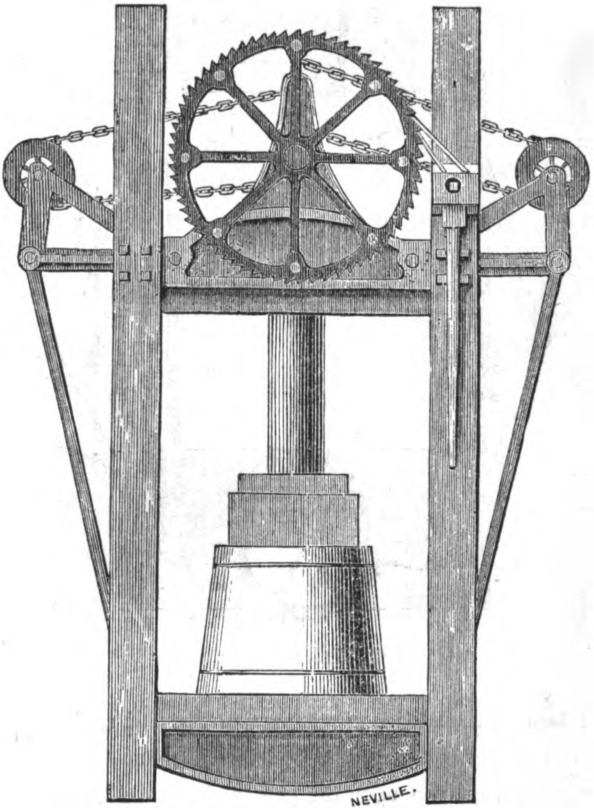


FIG. 272.

Fig. 272 displays a Press for Pressing Tobacco into Boxes, as shown in the cut. It is also extensively used for baling tobacco and drygoods. Though made to be operated by hand alone, it is of great power, and its full force can be realized by one man; the lever and attachments being so arranged that a slight power applied to the lever produces great pressure.

INGERSOLL'S

IMPROVED

PORTABLE HAY AND COTTON PRESS.

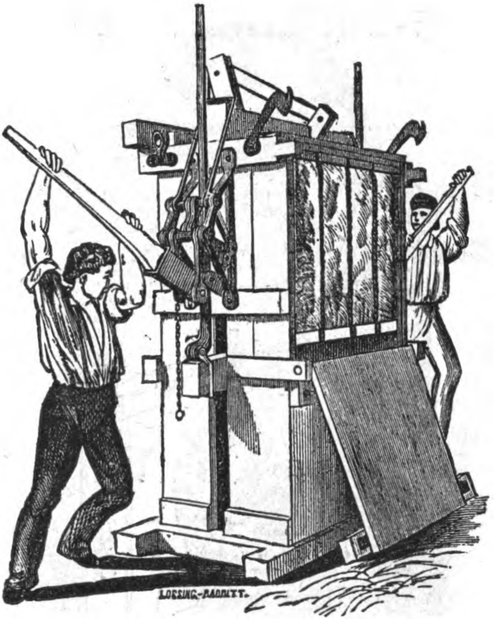

LOSSING-BARRITT.

Fig. 273.

This Press, on account of its cheapness, compactness, portability, and great power, is exactly adapted to the wants and means of every farmer, and is believed to be equal, in every respect, to any other machine of the kind ever manufactured.

By the use of this Press, the farmer who resides far inland, and who has been prevented from transporting his hay to market on account of its great bulk, may so far reduce the cost of transportation, by compressing the hay into solid and compact bales, as to make this valuable product one of the most profitable articles of farm culture.

The time occupied in pressing is about one minute; and the amount of pressure given on each end of the machine, ten tons, if required.

Size No. 1 is designed to produce a bale of hay 3 feet 10 inches long, 2 feet 4 inches wide, and about 2 feet thick, weighing from 175 to 200 lbs.

Size No. 2, bale 4 feet 2 inches long, 2½ feet wide, and 2½ feet thick, weighing from 300 to 350 lbs.

Machines of greater capacity are made to order; it is only necessary to mention the size of bale wanted, and the material to be pressed.

THE LATEST AND BEST.

PERKINS' PATENT

CORN-HUSKING MACHINE.

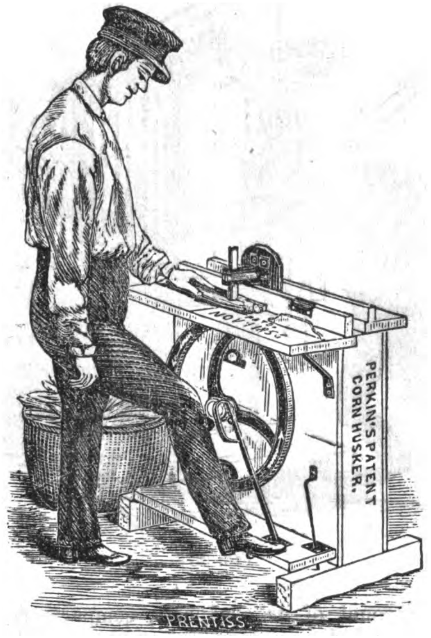


FIG. 274.

This is a great improvement on the old, slow, and imperfect process of Husking by hand. One man propels the machine with the foot (or it may be arranged to work by horse or other power), and passes the unhusked ears with his left hand to the machine. With a single blow, the knives, descending within one-eighth of an inch of the bottom of the receiver, instantly cut the end of the stalk, close to the grain on the ear, which, by the operation of the machine, is immediately thrown to the left, completely husked, while all the husk and stalk pass at the same instant to the right of the machine. This operation (so simple and perfect as to challenge the admiration of all who have seen it) is performed as fast as a man can pick up the ears, and with little fatigue to the operator.

IMPROVED COPYING PRESS.

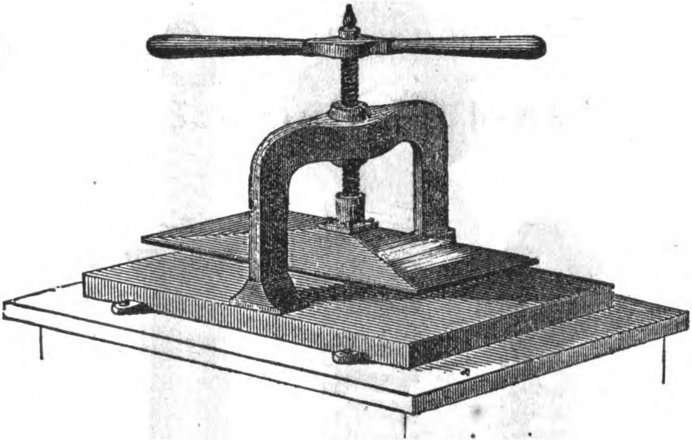


FIG. 275.

This Press has a wrought iron arch or yoke. Every part is finished with much care, and it is a beautiful and useful ornament for the counting-room.

WELL WHEEL AND BUCKET,

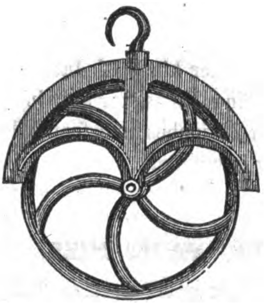


FIG. 276.

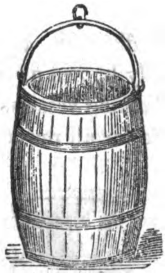


FIG. 277.

For raising water from deep wells; to be used with rope or chain. The Wheel can be used for many other purposes, as hoisting and lowering light articles in stores, etc.

We have the wheels of following sizes: 10, 12, and 14 inches diameter; and the buckets of various styles.

JACK SCREWS.

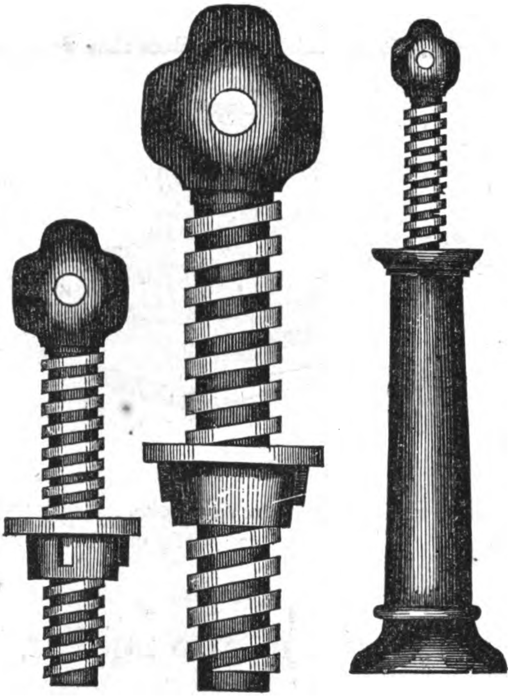


FIG. 283.

In addition to the above, we manufacture other kinds of Jack Screws, generally known as Sugar, Cotton, and Planking Jacks, for stowing cargo and planking vessels, etc., varying in size from 20 inches to 5 feet in length, suitable for all purposes where a Jack Screw is wanted.

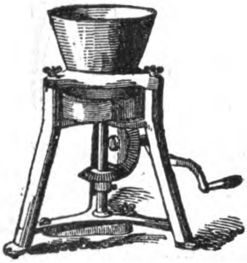


FIG. 284.

HARRIS'S PAINT MILL.

This cut represents Harris's Patent Mill for grinding and mixing Paints. Of these, we have three sizes to be worked by hand or power.

On this and the following page are described a few articles, the cuts of which were received too late for insertion among others of a like nature, but which are so excellent of their several kinds that we should consider our Catalogue incomplete without them.

IMPROVED COTTON SCRAPER.

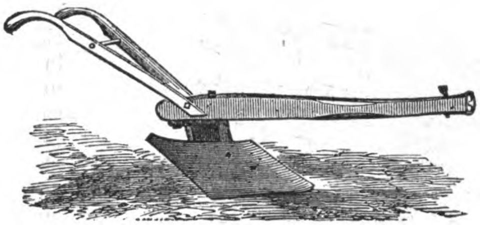


FIG. 285.

Fig. 285 shows an Improved Cotton Scraper, a very useful article at the first working of the cotton crop; the advantage of which is amply proved by the immense numbers of them now in use by planters. The Scraper, as represented here, has several valuable improvements which make it the best article of the kind in use.

Malleable Iron Garden Rake, with Brace.

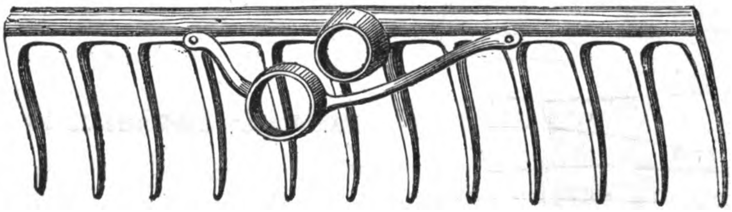


FIG. 286.

We have these of various sizes, with 10, 12, or 14 teeth; and we furnish them with, or without handles and braces, as may be wished.

MORGAN'S PATENT HARROW.

PATENTED MARCH 31, 1857.

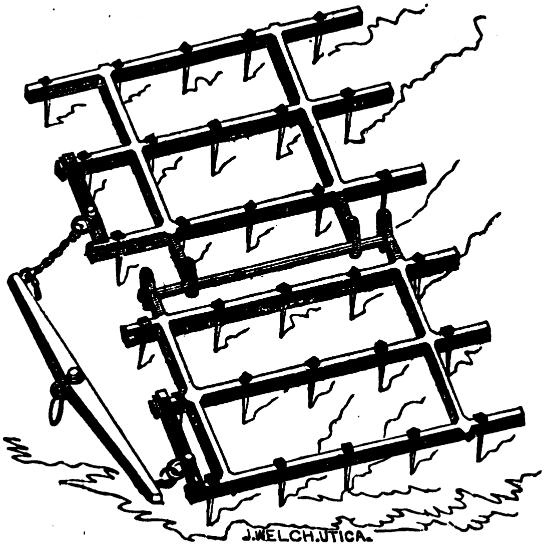

J.WELCH.UTICA.

FIG. 287.

The peculiarity of this Harrow consists in so joining the two parts that one part may rise vertically to the extent of ten inches or more above the other, in over-riding obstacles, or in conforming to any unevenness of the surface, without lifting or disturbing the action of the other part; and in like manner, either part may move in advance, or fall in rear of the other, a similar distance on meeting any obstruction. The first of these actions allows the Harrow to hug the surface, conforming to all undulations and unevennesses; and the second, besides favoring the easy passage over obstructions, occasions a zig-zag motion, sidewise, of the teeth, varying from a straight line and the track of each other; both being highly favorable to the more perfect cultivation of the soil.

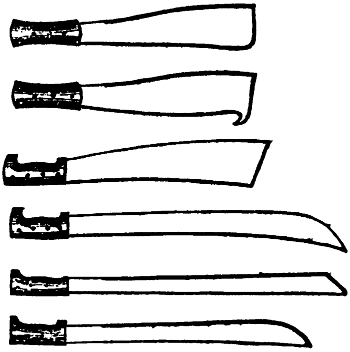


FIG. 288.

Machetes, or Cane Knives,

Of all kinds and sizes.

ARTICLES NOT ILLUSTRATED.

Anvils.

Boilers, Vegetable.
Brushes, Horse.
Bars, Crow.
Barrows, Iron Tray Coal.
  " Wood "
Butter Workers.
Butter Moulds.
Bolts, Plow.
  " Carriage.
Belting, Leather.
  " Gutta Percha.
Balances, Spring.
Blasting Tools.
Bellows, Blacksmith's.
Bee Hives, Phelps' Patent.
Bark Mills.
Bells, Cow and Sheep.
Bill Hooks.
Boxes, Cart and Wagon.

Carts, Hand.
  " Cane, for oxen or mules.
Chains, Trace.
  " Ox.
  " Log.
  " Pump.
Churns, Barrel.
  " Tillinghast's.
  " Rowley's.
Cutters, Cabbage.
Cards, Cattle.

Drills, Churn.
  " Upright.
Diggers, Potato.

Eggs, Glass Nest.

Fountains, all styles.
Flails.
Fan Mill Castings.
Fuse, Safety.

Grater, Horseradish
  " Potato.
  " Arrow Root and Yuca.
Glasses, Forcing.
Grindstones.

Hooks, Hay.
Hooks, Corn.
Hoops, Cheese.
Hose, Leather, all sizes.
  " Gutta Percha, all sizes.

Hose, Grenoble Hemp, all sizes.

Ice Plows and other Ice Tools.
Irons, Ox Yoke.

Knives, Edging.
  " Drawing.
  " for Hay Cutting Machines.

Lathes, Engine.
Lanterns.

Measures, Grain.
Muzzles, Ox.
Mills, Corn and Cob.

Nails, Horse.

Pails, Oak.
Planing Machines.
Presses, Lard.
  " Wine.
Pipe, Lead, all sizes.
  " Wrought-iron, all sizes.
  " Block Tin, "
Poppers, Corn.

Riddles.
Refrigerators.

Saw Frames, wood.
Shears, Sheep and Horse.
Swifts.
Sickles, Grain.
Sieves, Meal, etc.
Snaps, Rein.
Steamers, Vegetable.
Stump Machines.
Screws, Cider Mill.
Scrapers, Tree.
Shoes, Horse and Mule.
Saws, Hand.
  " Grafting and Pruning

Tongs, Blacksmith's.
Teeth, Harrow.

Wheels, Cart and Wagon.
Whiffletrees, Single and Double.
Wedges, Iron.
  " Steel, for Stone Splitting.
Wrenches, Malleable.
Wheels, Hoisting, for Stores.
Washing Machines.

Yokes, Neck.

Vices.

LIVE STOCK.

HORSES. CATTLE, SHEEP, SWINE, ETC.

We will execute orders for the purchase and shipment of all kinds of Live Stock, for any part of the United States or for foreign markets.

Our senior partner, Mr. ALFRED M. TREDWELL, who resides at Madison, Morris County, New Jersey, is extensively engaged in importing and breeding Cattle and Horses, and also personally acquainted with all the prominent stock breeders in the North and East, for several of whom he acts as agent in making sales.

In selecting Stock, we are therefore enabled to bring to bear that practical knowledge and experience which has contributed so much towards Mr. Tredwell's success as a winner of **First Premiums**, whenever he has exhibited at State and National Exhibitions.

We offer the benefit of these advantages to our customers, and any others who may wish to purchase Stock; pledging our best efforts to accomplish their desires and to protect their interests.

Mr. Tredwell is at present importing and breeding Devons and Ayrshires, from the choicest strains of blood which England and Scotland afford.

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